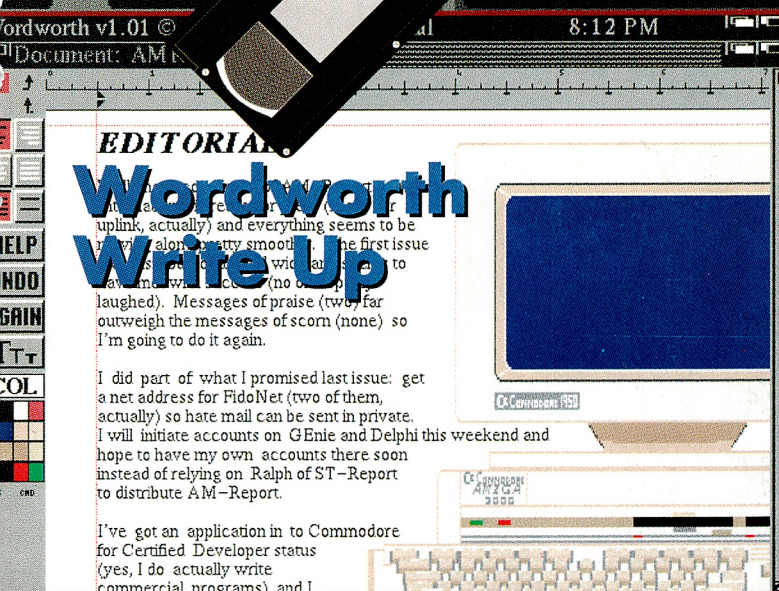
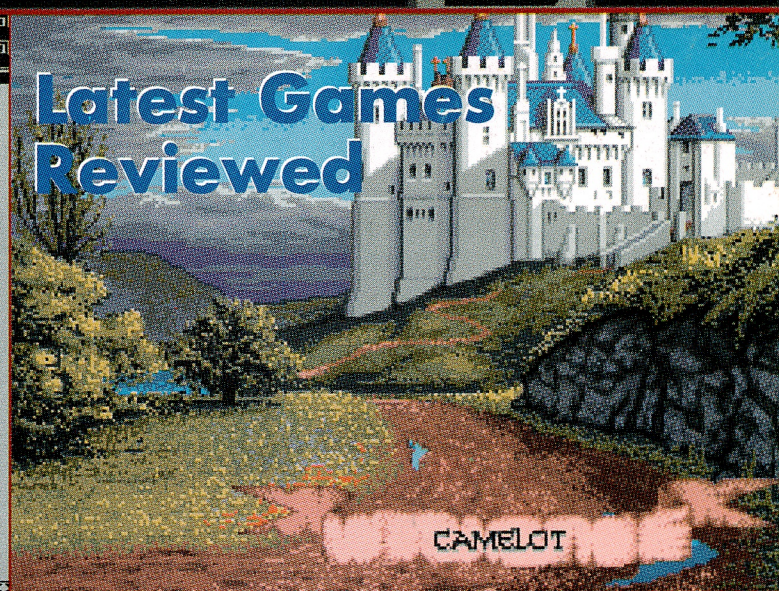


The Australian COMMODORE and AMIGA REVIEW

**Alter Image
Video Starter Pack**
Reviewed



**Latest Games
Reviewed**



C64 RAMLINK . World of Commodore Show Report

Comparison: Personal Organisers

Education . Hints and Tips . C64 and GEOS Column

Hey, look! 

**We will beat
any
advertised
price!**

Yes, folks, it's
More M.A.S.T. Magic!

**With
even more
great peripherals,
now at even better prices!** 

○ Software □ Software □ Software ○ Hardware □ Hardware ○

Amiga Vision.....\$140	Dr T's Tiger Cub.....\$ 99!	Pen Pal.....\$149	Micromegs.....\$ 89
Animagic.....\$169	excellence!.....\$229	Perfect Sound.....\$139	(512k RAM + Clock for A500)
ARexx.....\$ 65	Express Paint.....\$ 35!	Pro Page 2.0.....\$399	Minimegs.....\$409
Art Dept Pro.....\$299	Imagine.....\$399	Pro Video Post.....\$379	(2 Mb for A500/A1000)
AudioMaster III.....\$125	Imagine Companion...\$ 45	Pro Textures.....\$ 89	Unidrive.....\$145 !
Bars & Pipes.....\$189	InterChange.....\$ 65	Quarterback.....\$ 89	(Slim, low Power & NoClick)
Bars & Pipes Pro.....\$479	InterFont.....\$130	Quarterback Tools.....\$ 89	Enhanced Unidrive.....\$175 !
Blitz Basic.....\$149	Karafonts.....\$ 89	RxTools.....\$ 65	(above with Track LED & NoVirus)
Broadcast Titler 2.....\$379	Kara Animfonts.....\$ 75	The Art Department...\$110	TwinDrive.....\$259 !
CrossDos.....\$ 49	KCS 3.0 Level II.....\$369	VistaPro.....\$149	(Two Unidrives in a compact case)
Design Works.....\$149	Masterpiece Fonts.....\$249	Sculpt 4D.....\$599	3.5" Disk box.....\$ 17 !
DigiView.....\$249	MyPaint.....\$ 20!	Wordworth.....\$299	(Holds 100 x 3.5" disks)
Director 2.0.....\$159	PageStream 2.1.....\$299	XCad Professional.....\$399	<i>And Much, Much More!</i>

*** Flash 2000 SCSI/RAM board ***

Check out these great features!

- ✓ Up to 8 Mb RAM
- ✓ Fast 8 bit SCSI standard, upgradeable
- ✓ Optional 16 bit SuperCharged SCSI
- ✓ Massive transfer rates!
- ✓ Hard drive mounts on the card
- ✓ Three SCSI connectors (2 int, 1 ext)
- ✓ AutoBoot disable switch
- ✓ Fully Australian designed

\$299!
from only

New! 



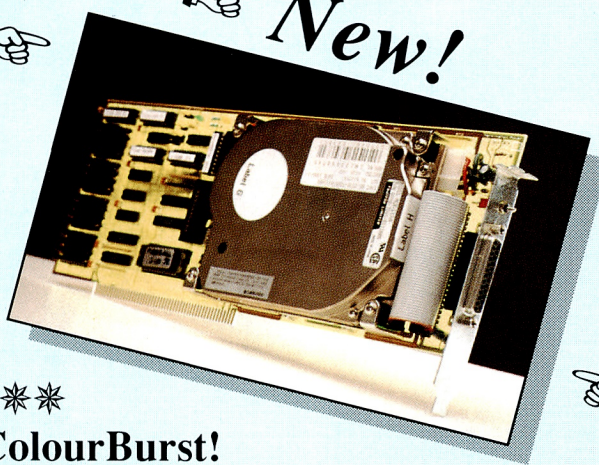
ColourBurst!

24 bit Video Engine - professional graphics

- ✓ 16 Million Colours in 768 x 580 HiRes
- ✓ For any Amiga (PAL and NTSC)
- ✓ External Genlock & IFF 24 compatible
- ✓ Video Graphics chip on board
- ✓ Includes 24 bit paint program
- ✓ Fully Australian designed

\$1199!
great value at

Lets you see how good your work really is!




New! 



Ask about
our new 2Mb
Chip RAM
board for the
A2000!!

Memory And Storage Technology

19-21 Buckland St Broadway NSW 2007  PO Box 249

Tel: (02) 281-7411 Fax: (02) 281-7414

ACAR

The Australian Commodore and Amiga Review

Notepad

Latest Amiga news, gossip and new releases

4

Amiga

Show Report

Wordworth

Alter Image

Keeping Track

Flash 2000

CLI Tutorial Part 13

Turbotext

Creating Batch Files

Andrew Farrell	All the fun of the Sydney World of Commodore	9
Andrew Farrell	This new heavy duty wordprocessor looks great	14
George Kimpton	Desktop video - a new genlock	19
George Kimpton	Some programs to remind you of important happenings	26
Combination SCSI	Interface and RAM expansion card	36
Andrew Leniart	Coming to grips with the CLI - for beginners	44
Tim Strachan	A powerful new text editor	54
Tim Strachan	Tutorial - customise your startup-sequence etc	56

C64 / 128

Ramlink

The C64 Column

GEOS Column

C64 Graphics & Sound

	Multi function compatibility interface	22
Owen James	Roundup of cartridges; letters answered	50
Owen James	Laser output, Gateway desktop, letters	47
Greg Perry	Easy sprites and multicolour sprites	60

Education

Things to do with Words

Things to do with Numbers

Anne Glover	Word games for young ones	40
Anne Glover	Playing with numbers and time	42

Entertainment

That's Entertainment

CDTV Launch

Game Reviews

Quickshots

Adventurer's Realm

News, Hints & Tips, Letters, Competition, Hall of Fame	65
A new source of entertainment	69
Turrican II, Big Box, Death Knights of Krynn, Spirit of Excalibur, Hill St Blues.	70
Vector Championship Run, Jockey Wilson's Darts, Super Off Road, Ninja Rabbit, King's Bounty, Battleset II for Harpoon	78
Help, Hints, Problems, Chit-chat, The Dungeon	75

Advertisers Index

Australian Commodore Review: 21 Darley Road Randwick,
NSW 2031 Phone: (02) 398 5111
Published by: Saturday Magazine Pty Ltd.

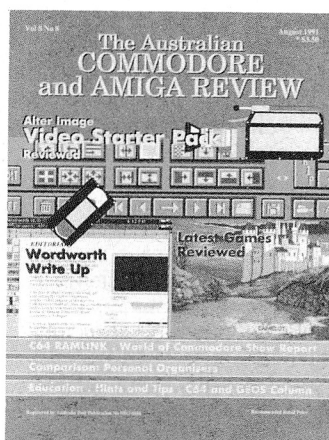
Editor:
Entertainment Section Editor:
Advertising:

Andrew Farrell
Phil Campbell
Ken Longshaw (02) 398 5111
or (02) 817 2509
Brenda Powell
Andrew Dunstall
Darrien Perry (02) 398 5111
NETWORK Distribution
Ian Liddell Pty Ltd

Production:
Layout:
Subscriptions & back issues:
Distribution:
Printed by:

Advertising: Ken Longshaw (02) 398 5111 or (02) 817 2509

**VOL. 8
NO. 8
AUGUST
1991**



Computer Man

formerly Regional Computers

The Amiga Supermarket

SPECIAL: Diskettes 3.5" DSDD \$6.99

GVP 42Mb/F A500 Series II
\$939

GVP 52Mb/Q A500 Series II
\$999

GVP A2000 HC8/52Mb/Q
\$1050

GVP A2000 HC8/80Mb
\$1170

☆ Amiga 500 computer CALL

☆ Amiga 2000 \$1379.00

Amiga 3000/40 Call

Video Digitiser A500/2000 \$99.99

AT bridge board \$779.99

Sound Sampler \$50.00

Stereo Sound Sampler \$99.00

Action Replay 2000 ????

Action Replay 1000 NEW

Action Replay 500 \$165

Memory Expansions

512k with switch & battery \$75.00

1Mb A1000/500 extern/0 \$199.00

2Mb A500 Internal/0 \$99.99

2Mb A500 Internal/0 \$299.99

AT Once Board

KC XT Board Call

Modems

Maestro Modems 2400 \$265.00

Maestro Modems MNP \$379.00

Fax Modem Maestro 9600 \$379.00

Hard Drives

40 Mg Hard Drive \$499.00

52 Mg Hard Drive \$599.00

GVP 105Mb/Q A500 Ser's II \$1299.00

GVP A2000 HC8/105Mb CALL

GVP A2000 HC8/170Mb \$1750.00

Amiga A590 20Mb \$579.00

Printers

Star

L C10-II \$325.00

LC24-10 \$489.00

LC15 \$569.00

LC24-15 \$729.00

LC200CL \$449.00

NX1000CL \$369.00

LC24-200 CL \$699.00

LC24-200 \$599.00

Citizen

GSX200 \$439.00

GSX140 \$680.00

GSX180D CALL

Epson

LX 400 \$269.00

LQ 400 \$469.00

LX 850 \$379.00

LQ 550 \$559.00

LQ1010 \$749.00

Soikosha

SP2000 \$249.00

SL90 \$399.00

Free cable this month

Disk Counts

3.5" DSDD \$6.99

3.5" DSHD \$18.00

3.5" Memorex \$16.00

Lifetime Guarantee

3.5 Internal Drive \$159

3.5" External Drive

Amiga Mouse \$39.99

1 Mb RAM exp A590 \$85

1 Mb Simms exp GVP \$85

Genlock New Type \$289

VIDI RGB Splitter \$199

☆ **GVP 80 Mb/M A500 \$1199** ☆

Public Domain

Fish 1/520 Amicus Amigan T-Bag Faug

Amaz NZ Amigoz CCCC Compass Macro

Cost from **\$1.49** per disk 17Bit \$2

Buy 10 - One Free

Specials this month :

GVP 42Mb H/C A2000 \$799

A500 Accelerator 68030 ?

A2000 Flicker Fixer \$399

CDTV now in

We will try to be the best on price

018 911 011 or 09 328 9062

PO Box E265, Perth 6001

611 Beaufort Street, Mt Lawley Perth 6050 WA

Editorial

CDTV - The Launch

When a product launch takes place there's always the chance you'll get to see something unexpected. Maybe the embarrassed face of one of the company executives as the new product fails to perform. Other times it's screams from public relations people as prying journalists ask pointed questions. And occasionally it's a horse trotting up and down the aisle with a man on its back singing



Rhinestone Cowboy as the animal relieves itself on the carpet. In the case of the CDTV launch, the product performed beautifully and the journalists were impressed, but the horse was there in all its glory to kick off this splendid occasion.

Apart from the horse, the only other animal at the launch was the video wall, which gave Commodore's Gary Mason a little trouble. Nevertheless, Commodore International's Special Projects Director, Gail Wellington, did a splendid job of coping with the pressures of a couple of equipment hiccups, and went on to soothe the crowd with a good number of impressive demonstrations, culminating in the amazing Psynosis game *PlanetSide*.

At the end of it all I was convinced CDTV would be a big hit. There's no doubt once you see the product working under the guiding hand of an experienced user it looks very impressive. However, it is one very expensive games machine. And at over \$2,000 for the player plus Grolier's Encyclopaedia disc, it doesn't quite have the same status level as a set of 21 leather-bound books. Sales might be a trickle before they become a flood.

For me, the really exciting thing would be the launch of the A690 external CD-Drive for the Amiga 500. According to Wellington, a similar device will be available for the A2000/3000. Future releases of reference works will support clipboard to enable text and hopefully graphics to be easily included in your own documents. The A690 might be here before December at a bit under \$1000. If they can just push the price a bit lower, Commodore should be able to sell a squillion.

I for one would prefer to have a CD-Drive than a player. After all, even though CDTV looks at home in your Hi-Fi system, chances are not all the family are going to agree. Some of them may want to watch *Neighbours*. The technology is slick, but it will take a while to educate consumers that what looks like not much more than a CD player is in fact a powerful interactive multimedia machine.

So, yes CDTV is fantastic. Yes, it has the potential to bring computer technology to a much larger group of consumers than computers alone. But, right now we need the external CD drive. It will create a bigger market for the software companies who might not be able to wait around for everyone to realise how useful a CDTV really is. Local applications are also very important. At the moment, there are still only a few people looking into producing Australian titles, but this may change as the path is made clearer.

Overall, it was a very enjoyable evening. Hopefully the daily press will pick up on CDTV, along with general interest magazines. It deserves plenty of coverage. Congratulations to Commodore for having the foresight to combine the technologies of Infra-Red control, CD and Computer to create a product that may yet revolutionise home entertainment and education.

Andrew Farrell

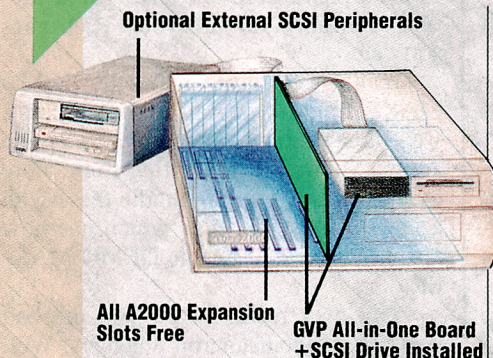
The Ultimate All-in-One Amiga® 2000 Add-on... 68030 POWER+ 16MB RAM+SCSI CONTROLLER

Replaces up to FOUR "normal" expansion boards!

IMPACT

Series II

Now, a 22 or 33 Mhz 68030 accelerator board, up to 16MB of 32-bit wide RAM and a high-performance SCSI hard disk controller in a single A2000® "CPU slot" expansion board!

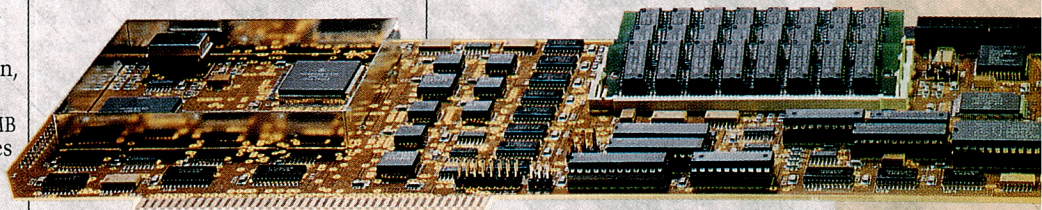
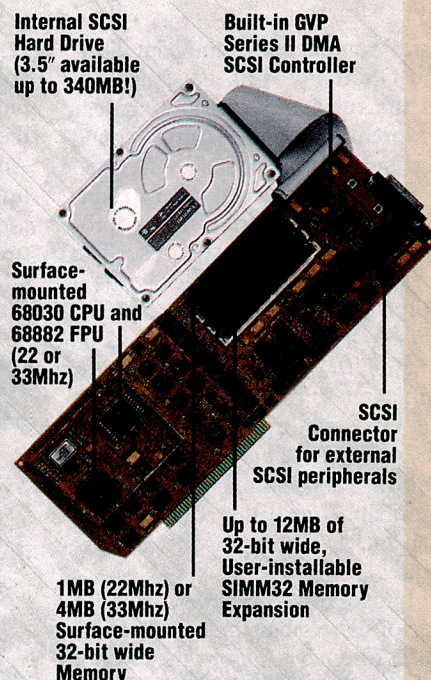


Check out these features:

- ✓ The perfect companion for NewTek's Video Toaster.™
- ✓ 22Mhz or 33Mhz factory installed, surface mounted, 68030 CPU and 68882 FPU.
- ✓ Up to 16MB of 32-bit wide memory expansion. 4MB minimum factory installed memory on 33Mhz version, 1MB minimum for 22Mhz.
- ✓ GVP's new custom 32-bit wide, 1MB or 4MB, SIMM32™ memory modules offer flexible, easy-to-install memory expansion. 22Mhz model has 1MB factory installed memory, expandable to 13MB. 33Mhz model has 4MB factory installed memory, expandable to 16MB.
- ✓ On-board high-performance "Series II" auto-booting SCSI controller with factory installed FAAASTROM SCSI driver and SCSI connectors for attaching both external and internal SCSI peripherals.
- ✓ Direct DMA access to the full 16MB range of 32-bit wide memory expansion by the on-board SCSI controller. Due to the A2000 bus architecture, this is ONLY possible when SCSI controller is placed directly on the 68030 CPU bus (as is

the case with the A3000!). Provides ultimate SCSI hard disk performance!

- ✓ GVP's legendary FAAASTROM SCSI driver supports virtually all SCSI devices currently on the market, including hard disk drives, CD-ROM drives, Magneto-Optical drives, removable media drives and tape drives.
- ✓ Switch to 68000 mode by simply clicking on our new "68000 Mode" Icon, or include our special "mode switching" utility in your startup-sequence and select required mode each time system is rebooted, by holding down mouse buttons.
- ✓ Provides the ultimate expandability of your A2000 system. Plugs into the "CPU accelerator" slot, thereby leaving ALL FIVE A2000 expansion slots free for future expansion.



COMPARE:	A2000 +GVP All-in-One	Commodore A2500/30	Commodore A3000®
68030 CPU and 68882 FPU	Y	Y	Y
Maximum CPU clock speed available & shipping TODAY	33Mhz	25Mhz	25Mhz
Maximum 32-bit wide FAST memory on 68030 CPU board	16MB	4MB	16MB
Direct DMA access to more than 8MB of fast memory	Y	N	Y
DMA SCSI controller built-in on 68030 CPU board	Y	N	Y
Number of open Amiga expansion slots with 68030 CPU, SCSI controller and more than 4MB fast memory installed	5	3	4
RAM upgrades through easy-to-install 32-bit wide SIMM memory modules	Y	N	N

GVP

SIMM32 and GVP are trademarks of Great Valley Products, Inc.
Amiga, A2000 and A3000 are registered trademarks of Commodore-Amiga, Inc.
Video Toaster is a trademark of NewTek Inc.

Distributed in Australia by

Power Peripherals Pty. Ltd. Expansion Solutions

1st FLOOR, 257 HAWTHORN RD, CAULFIELD NORTH, VIC 3028 AUSTRALIA
PHONE: (03) 532 8553 FAX: (03) 532 8556

Notepad

Audio Engineer Junior

Aussie companies RamScan Software and GSoft Pty. Ltd. have just announced the release of *Audio Engineer Junior*, a premium quality Amiga sound sampling and editing package. Derived from their world renowned *Audio Engineer Plus*, the Junior offers uncompromising performance and ease of use. The software supplied with the package is a full featured version of the renowned *Audio Engineer* package (sold overseas as *Audio Master III*). The package features 56k sample rates, the ability to use all available fast memory, extended audio frequency response and electronic volume control. The result is performance that is probably unrivaled by anything other than the *Audio Engineer Plus* system itself.

Most budget priced samplers promise good performance but fail to deliver. With *Audio Engineer Junior* you will not be disappointed. *Audio Engineer* comes bundled with a Compact Disk player simulator program that can be used to replay up to 20 samples. *Audio Engineer Junior* is available in most Amiga shops now for about \$99.00. *Audio Engineer Junior* is distributed in Australia by GSoft Pty. Ltd (08) 254 2261.

Prima Drives

Amiga hardware pioneer ICD Incorporated has launched the Prima, a low cost, high performance hard drive designed to fit 52 or 105 megabytes of storage inside an Amiga 500. Built around the new generation of low power, 11 millisecond 3 1/2 inch hard drives from Quantum, the new Prima won't take up limited desk space with bulky external boxes or cabling.

Instead, Prima is specially designed to fit inside your A500 - in place of the internal floppy drive - and includes an extra internal adapter, called the ShuffleBoard, for converting your external floppy drive for use as DF0:

Along with being fully auto configuring, Prima's advanced performance fea-

tures include autobooting from FastFile System partitions, high speed disk caching and complete support for AMax-II.

Prima provides a complete hard drive upgrade package for any Amiga 500 system already equipped with a switching power supply, at least one megabyte of RAM and an external floppy drive.

ICD has been providing state of the art mass storage solutions for microcomputer owners since 1984, and is one of the largest hardware companies in the Amiga marketplace. In addition to a full time technical support staff, ICD offers product support and update files on their own in-house BBS, CompuServe and GENie. For more information contact Maxdrives on 018 717 506.

GVP acquires Lake Forest Logic

Great Valley Products has acquired the entire product line of Lake Forest Logic, Inc. of Lake Forest. They have also appointed Lake Forest's Erik Quakenbush as director of software development.

In making the announcement Gerard Bucas, president of GVP, called the acquisition "an exciting move that will allow GVP to develop top-notch software in-house." Long noted for its hardware, GVP recently entered the software market with the acquisition of the distribution rights of *Scala*, a professional titling/presentation software package. Now with Lake Forest on board, GVP will add *The Disk Mechanic*, *A.D.A.P.T. the 680x0 Assembler* and *Macro Paint* to its growing list of software titles.

Current owners of software formerly published by Lake Forest Logic will receive technical support through GVP's BBS (215-337-5815) or via the tech support phone lines (215-337-8770).

Stand-alone Video Toaster system

At the National Association of Broadcasters show, NewTek launched a stand-alone Video Toaster system. The new \$3,995 (U.S.) Video Toaster is a complete solution for broadcast quality video production at a revolutionary price. "Our original plug-in card version of the Toaster required that the user be familiar with computers", comments

Continued on p6

UPDATE COLUMN

Well here another month has gone by and I hope many of you took advantage of the sales I mentioned to make enormous savings. Well, in fact I know many of you did by the number of Warranty Cards that have been sent in. On that point, can I please ask you to only send in one Warranty Card as otherwise you are simply wasting postage and the first Warranty Card is sufficient to get you on to the Update Club and give you a lifetime warranty on all your Packtronics software.

Well, we have released DEMO MAKER and it was an instant success, we actually sold out completely at the Amiga Show. We are getting some more in and we are going to bundle these with a new Companion Disk which has now also been released for the DEMO MAKER.

You may recall I told you the bad news about the Cameron Scanners. Well the good news is we have now released a GOLDEN IMAGE HAND SCANNER at only \$399. This is an excellent black & white hand scanner for graphics. It is 100-400 d.p.i. and the software can convert into 16 grey scale.

Probably the biggest news of all is the release of the AMOS COMPILER. I know that it has been promised for a long time but at last it is here. I once said that without AMOS you really haven't got an Amiga and now I must say that without the compiler you really haven't got AMOS!

NEW GAMES

Great new games just released for the Amiga include: NINJA RABBITS, ED THE DUCK, ZARATHRUSTA and budget games such as HYPERFORCE, AQUANAUT, STAR GOOSE, BAD COMPANY, etc. etc. from only \$12.95. On C-64 we have new budget beaters @ \$7.95, including such horrors as FRANKENSTEIN, WOLFGAN, JACK THE RIPPER, and many others and a whole pile of \$9.95 brilliant games, including ROGUE TROOPER, NINJA RABBITS, and ARDOK THE BARBARIAN.

Remember, insist that your retailer bring in our full range of great games titles. □

Advertisement

Beauty and Functionality Redefined

THE NEW **IMPACT** *SERIES II*™ **A500-HD+**

The Next Generation in Amiga® 500 Add-On Peripherals

IMPACT

Series II

Turn your A500® into a
Serious and More Fun
Computing Tool Today!

GVP's New **SERIES II**
A500-HD+ is The Ultimate in
Hard Drive, Memory and
Expandability for your Amiga 500.
Major features include:

Leading Edge

Same high-tech custom VLSI and
FAAASTROM™ features as GVP's new
Series II A2000 SCSI-RAM Products.

Foresight

Unique new "Mini-Slot"™ brings out
all the A500 expansion bus signals,
allowing for exciting future expansion
options – the only intelligent
alternative to risky "Pass-Through"
functionality.

Reliability

Includes internal fan to keep you cool
and robust power supply ensuring your
A500 power supply will not be
overloaded. GVP will not compromise
on quality and reliability!

Memory Expansion

Internal RAM Expansion up to
8MB using easy-to-install SIMM
memory modules.

Sleek

Custom injection-molded styling
perfectly matches your A500 for
unequaled beauty and elegance, setting
a new standard for A500 peripherals.

State-of-the-Art

New 1"-high internal hard disk drive;
available from 40MB through 100MB.

Performance

Provides no-compromise hard disk
performance which until now has
never been seen on the A500.

Seeing is Believing

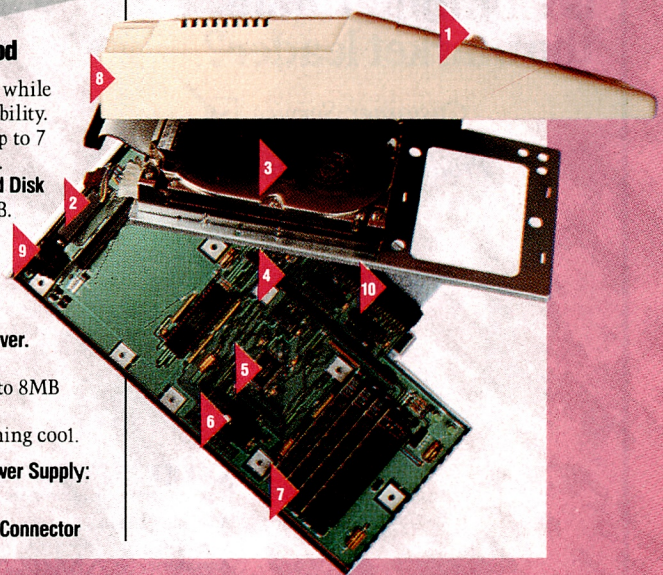
Take one for a Test "Drive" at your
nearest GVP Dealer today!

**Call for Special End-User
Trade-Up Details!**



Take a Look under the Hood

- 1 Game Switch: Enables RAM while enabling full game compatibility.
- 2 External SCSI Port: Allows up to 7 SCSI devices to be attached.
- 3 1"-High Factory-installed Hard Disk Drive: 40MB through 100MB.
- 4 "Mini-Slot": For future expansion options.
- 5 GVP's Custom VLSI Chip.
- 6 GVP's **FAAASTROM** SCSI Driver.
- 7 Internal RAM Expansion: Up to 8MB
- 8 Internal Fan: Keeps you running cool.
- 9 Dedicated Universal Input Power Supply: Included.
- 10 Reinforced 86-PIN Card Edge Connector



GVP

Educational pricing program now available.

Series II, FAAASTROM and GVP are trademarks of Great Valley Products, Inc.
Amiga and A500 are registered trademarks of Commodore-Amiga, Inc.

Distributed in Australia by

**Power
Peripherals** Pty. Ltd. Expansion Solutions

1st FLOOR, 257 HAWTHORN RD, CAULFIELD NORTH, VIC 3028 AUSTRALIA
PHONE: (03) 532 8553 FAX: (03) 532 8556

Paul Montgomery, NewTek's Vice President, "This new Video Toaster system in the flagship product we've been working towards."

"It makes the complete Toaster system price less expensive and opens up many new channels of distribution."

The Video Toaster system will begin shipping from NewTek to resellers in June. At the launch, over 25 software and hardware developers are announcing product for the new Video Toaster platform.

"We are excited by the flood of high quality developers that are working on innovative products for the Video Toaster", says Mark Randall, Newtek's Director of Marketing. "The Video Toaster is now clearly the standard for desktop video production." The Toaster is already in use at television networks, local affiliate stations, video production houses, and cable companies.

The Video Toaster is the world's first desktop television studio. It allows virtually anyone to produce videos that have the effects and graphics quality of network television. The Video Toaster's unprecedented price of \$3,995 (U.S.) is made possible by new technology invented at NewTek and incorporated into special custom chips that perform real-time video manipulation. Over four years in development, the Video Toaster is a complete system including easy-to-use software for video switching, digital video effects, character generation, colour processing, 3D animation, and paint graphics.

Why is Computermate the market leader?

Customer Service ☒

Product Knowledge ☒

Availability ☒

Product Support ☒

Value ☒

Largest Range ☒



Phone (02) 457 8388
Fax (02) 457 8739

BIG ENOUGH TO BE PROFESSIONAL - SMALL ENOUGH TO BE PERSONAL.

Although demonstrated at the recent World of Commodore Show in Sydney, the toaster is still not available in PAL format and no plans appear to exist for such a device in the near future.

Virtual Reality Laboratories Inc release Distant Suns 4

Distant Suns 4.0 is comprised of the program disk and two data disks. The minimum program requires one meg and two floppy drives (or a floppy and hard drive) to use. List price is \$99.95 (U.S.). *Distant Suns 4.0* is not copy protected, and it will automatically determine whether it is running on a PAL or NTSC machine and display correctly. VRLI will continue to sell and support the *Distant Suns 3.0* version which runs in 512K in the NTSC version (one meg PAL) at a reduced list price of \$49.95 (U.S.) while supplies last.

Distant Suns has undergone its most comprehensive upgrade since its initial release in 1987 as *Galileo* version 1.0. Here is a partial listing of some of its new features.

These features include AREXX support which could be used for telescope control as well as the ability to create ANIM files. Allows you to save and restore multiple user configurations and has multiple resolution support (interlaced, overscan). Double buffered screens together with toned down colours for easier long session viewing, and the ability to put your eyepoint off the earth and look back at our solar system all the way out to 400 astronomical units (40 AU = distance of Pluto's orbit). This feature allows display of orbits, hairline grid representing the plane of the ecliptic, object and orbit variations above or below the ecliptic.

Features also comets and asteroids and the ability to define user objects orbiting the sun. Useful for new comets, asteroids, and deep space craft solar system trajectories (sorry, compound trajectories are not available, although the user can treat trajectory changes as a new object), and includes a user definable search list.

More Stars! Basic program expanded from 2,200 stars to 4,200 stars. With soon to be available expansion disks you can expand your star data to 255,000 stars.

Chip-RAM PLUS

MAST now has a 2MB Chip RAM board for the Amiga 2000 and the Amiga 500. Chip-RAM PLUS is user installable and upgrades an Amiga 500 or A2000 to the same amount of graphics memory as the Amiga 3000..

Workbench 2.0 automatically recognises this memory, meaning that it is accessible by application software. Chip-RAM PLUS is also an ideal companion for owners of Colorburst who will benefit from the extra graphics RAM.

Chip-RAM PLUS includes the new Super Fat Agnus chip that is used in the A3000, and also includes 2 megabytes of memory on board. The memory chips used are 4 megabit CMOS chips, and with only 4 chips it provides a very low power unit. This memory replaces any chip memory already in the computer. A significant power saving will be obtained if the original chip memory on the motherboard is disabled or removed.

Suggested retail price \$699. From MAST, 19-21 Buckland St, Broadway NSW 2008. Tel 02 281 7411. ☐

M V B

COMPUTERS

506 Dorset Road, Croydon 3136
Phone (03) 725-6255

Computa Magic

Shop 5 / 30 Hall Street, Moonee Ponds 3039
Phone (03) 326-0133

(GVP) Great Valley Products

GVP SERIES II A2000 SCSI Hard Card + 8MB RAM Controller. (HC8/xx) (0k)

Series II A2000 HC8/52Mb Quantum \$999 (New 1 inch high mechanism. 19ms access time)

Series II A2000 HC8/105Mb Quantum \$1359

Series II A2000 HC8/170Mb Quantum \$1750 (15ms access time)

GVP SERIES II A500 HD+ (SCSI controller, 8Mb RAM Expansion, custom mini-slot, perfectly matching case)

Series II A500 HD8/40Mb Fujitsu \$985

Series II A500 HD8/52Mb Quantum \$1119

Series II A500 HD8/105Mb Quantum \$1469

One Card * Accelerator
* SCSI Hard Card
* 16Mb RAM exp.
The GVP SERIES II Accelerator

*All products are in stock
\$10 overnight shipping (Australia wide)*

*12 months warranty on all items
24 months on Quantum Hard Drives*

Mega Special

**Blazing Fast SERIES II
A2000 Hard DISK + 8Mb
RAM Card with 42Mb
Hard Disk. (0k)**

\$880

A500 Microbotics 68030 Accelerator \$CHEAP

The ULTIMATE A2000 Expansion

- *22Mhz or 33 Mhz models available
- *Single PCB design (featuring)
 - *68030 (cpu), 68882 (fpu)
 - *SERIES II SCSI controller with GVP FAAAST ROM
 - *Up to 16Mb of 32-bit-wide RAM (60ns)
 - *Optional mounting bracket for 3.5" SCSI hard disk.
 - *Supports All WorkBench revisions and Amiga UNIX
 - *The fastest ZERO wait-state design possible.

GVP SERIES II ACCELERATOR

22Mhz, 1Mb RAM
\$1,699

33Mhz, 4Mb RAM
\$2,649

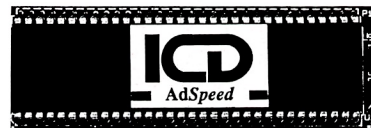
Flicker Free Video™

With Flicker Free Video (FFV) and a standard VGA or multi-frequency monitor, any Amiga® 500, 1000 or 2000 computer can produce a high quality display, free of interlace flicker and visible scan lines. Installation requires no soldering or advanced technical knowledge and frees the video slot in Amiga 2000 computers for other uses. FFV is compatible with all software, works in low and high resolutions interlaced or not, and has no genlock conflicts. FFV uses a multi-layer circuit board and surface-mounted components, packing a lot of power into a very small space. Both PAL and NTSC are automatically recognized and fully supported. Full overscan is supported, not just a limited overscan. Three megabits of random access memory are used to ensure compatibility and overscan screens as large as the Amiga can produce.

INTRODUCTORY OFFER \$649.00

AdSpeed™

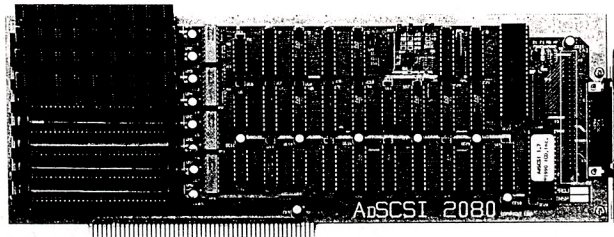
ICD expands its line of innovative enhancement products for the Amiga with the introduction of AdSpeed, a full featured 14.3 MHz 68000 accelerator for all 68000-based Amiga computers. AdSpeed differs from other accelerators by using an intelligent 16K static RAM cache to allow zero wait state execution of many operations at twice the regular speed. All programs will show improvement. AdSpeed will make your Amiga run faster than any 68000 or 68020 accelerator with on-board RAM. AdSpeed works with all 6800 based Amiga computers, including the 500, 1000, and 2000. Installation is simple and requires no soldering. AdSpeed has a software selectable true 7.16 MHz 68000 mode for 100% compatibility - your computer will run as if the stock CPU was installed. 32K of high speed static RAM is used for 16K of data/instruction cache and 16K of cache tag memory. A full read and write-through cache provides maximum speed.



\$549.00 BONUS \$50 Cashback on return of old 68000 (\$499.00)

AdSCSI™ 2080

The fastest, most versatile SCSI host adapter (hard drive interface) available for the Amiga 2000 now comes in a new configuration. AdSCSI 2080 is not DMA, but its clean design and advanced caching driver provide greater throughput than any available DMA interface. All the features you want are included at no additional charge: autoboot from Fast File System partitions, Commodore® SCSI Direct and Rigid Disk Block conformance for no mountlist editing and compatibility with third party SCSI devices, and the most advanced removable media support available, including automatic DiskChange and no partitioning restrictions. AdSCSI 2080 also includes sockets for adding two, four, six, or eight megabytes of RAM using 1 megabyte SIMMs. If expansion slots are in high demand then this card could be your answer.



**AdSCSI 2080 OK RAM + 52MB Quantum LPS HDD
BARGAIN PRICE \$999.00**

AdIDE™

AdIDE™ provides an inexpensive alternative to a full SCSI interface. Sometimes called "AT drives", IDE drives have an embedded controller and are designed for connection to an AT PC bus. Nearly all drive manufacturers are now producing these low cost units.

AdIDE uses the same advanced software supplied with our AdSCSI host adapters. It delivers incredible speed and performance in a very small package. Features include autobooting from FastFileSystem partitions, A-Max II support, and more. AdIDE/40 is for the Amiga 2000. It fits underneath the CPU chip and uses no slot. The included 40 pin cable connects it to standard 3.5 inch hard drives.

AdIDE/44 is for mounting a 2.5 inch drive inside the Amiga 500. It includes the standard 44 pin cable and drive mounting brackets.

**Price - AdIDE-40 \$260.00
AdIDE-44 \$290.00**

A500 Internal Hard Disk

The smallest hard drive/interface in the world is now available for mounting inside your Amiga 500! This little sweetheart gives 20 megabytes of high speed performance yet takes absolutely no desk space. Novia 20i includes complete instructions and all the hardware necessary for a simple, clean no-solder installation

INTRODUCTORY OFFER \$999.00

SYQUEST 44MB removable drive \$899.00

Flicker Free Video, FFV, AdSpeed and AdSCSI are trademarks of ICD, Inc. Commodore is a registered trademark of Commodore Electronics Limited. Amiga is a registered trademark of Commodore - Amiga, Inc.

Australian Distributor and Registered AMIGA Hardware Developer
Maxdrive Systems Pty Ltd
PO Box 56, Darling Heights, Qld 4350
Phone (008) 076 301 - Orders Only
Enquiries/Dealer 018 717 506. Fax (076) 361 458
VISA - BANKCARD - CHEQUE - Accepted
NSW: (02) 523 3867 - Rob Self
Qld: United Computers Group, Ipswich (07) 282 6233 - Royce

Phone: (06) 288 0131

Fax: (06) 288 0337

24 HOUR SERVICE



ABYSS

the exciting new arcade game from



Abyss is a colourful, fast paced arcade style game featuring:-
Four levels of scrolling Game Save feature
Super-bitmap game play High Score table

ONLY \$45

It's you and your Anadome versus Harry Bow and his Nasties

ARE YOU UP TO THE CHALLENGE ?

WHY CHOOSE BRIWALL?

WE'RE
MAILORDER
SPECIALISTS!

SATISFACTION
GUARANTEED!

NEW LOOK!!
EXPANDED RANGE
LOWER PRICES

PRICE MATCH

Any software advertised
in this magazine
WE WILL MATCH !!!
(Except Specials)



Free gift voucher with every order
Send now for our all new low price catalogues!

Did you see the new
CDTV programmes
featuring **BARNEY BEAR**
at the
**WORLD OF
COMMODORE SHOW?**

Get these and other great
CDTV programmes from
BRIWALL AUSTRALIA
First with the latest

Listed below is a sampling of our great range of products at excellent prices. We currently have over 1000 Amiga products (growing daily) and a great range of 64/128 products (over 400) to cater for your every requirement. We also stock a large range of utilities and books, and we guarantee all our products. Drop us a line, or phone or fax us for our free catalogues which include latest games and educational programs!

64/128

UTILITIES

1750 RAM EXPANDER	399
1541/1571 DRIVE ALIGNMENT	44
1581 TOOLKIT V2	60
ASSEMBLER/MONITOR/64	60
BASIC 8	48
BASIC 8 TOOLKIT	29
BASIC COMPILER 64 or 128	80
BIG BLUE READER 64/128 V3 1	65
CP/M KIT	55
COBOL 128	58
COBOL 64	68
SUPER 81 UTILITIES	35
MAVERICK COPIER V5	50
DIGITALKER 128	39
SUPER SNAPSHOT 5 W/C128 DIS	110
SUPER SNAPSHOT V5	93
SYSRES ENHANCED	25

ACCESSORIES

APROSPAN 4 slot cartridge holder	49
1200 MODEM	125
2400 MODEM	167
VIDEO RAM 64K CART FULL	90

CREATIVITY

ANIMATION STATION	129
HOLIDAYS & SEASONS	39
HOME DESIGNER 128	49
HOME DESIGNER/Circuit Symbol Lib	19
NEWSMAKER 128	43
SPECTRUM 128	49
1 PAINT	59

GEOS

GEOS 64 VERSION 2	59
GEOS/PROGRAMMER 64 / 128	39
GEOCALC 128	49
FONTPAK INTERNATIONAL	39

GEOCHART 64/128	39
GEOFILE 128	49
GEOFILE 64	39
GEOPUBLISH 64/128	49
GEOS 128 V2	69

GENERAL PRODUCTIVITY

POCKET FILER 2	65
POCKET PLANNER 2	65
POCKET SUPERPACK 2	145
POCKET WRITER 3 (64 OR 128)	89
SECURITY ANALYST 128	39
SUPERBASE 128 - V3	59
SUPERBASE 64	59
SUPERBASE/Script/Bk 128 Pak	130
SUPERBASE/Script/Bk 64 Pak	EACH
SUPERSCRIPT 128	59
SUPERSCRIPT C64	59
TECHNICAL ANALYSIS System 128	85
TECHNICAL ANALYSIS SYSTEM 64	55
BANK STREET WRITER	89
DATA MANAGER	40
SWIFT CALC 64	35
WRITE STUFF 64	40
WRITE STUFF 64 W/TALK	49
WRITE STUFF 64 C128 VERSION	49
WRITE STUFF LEGAL TEMPL	19
CMS ACCOUNTING 64 OR 128	260

GAMES

GAMES PACKS - 2 FOR 1 ONLY \$39	
DRAGON BREED & HAMMERFIST	
EYE OF HORUS & SWORD OF KADASH	
PHOBIA & E-MOTION	
ALTERED BEAST & DELIVERANCE	
PIPEMANIA & RAINBOW ISLANDS	
JINXTER & CRIMSON CROWN	

GREAT GAMES SPECIALS

AMIGA

DEMONS WINTER	25
THE LAST INCA	15
JACK NICKLAUS GOLF	25
MIGHT & MAGIC II	49
MEAN 18 GOLF	45
SIM CITY	55
TEENAGE MUTANT TURTLES	39
BARNEY BEAR MEETS SANTA	28
SEX VIXENS FROM SPACE	15
BRIDE OF THE ROBOT	15

C64/128

BATMAN	20
ERNIE'S BIG SPLASH	20
SIM CITY	35
TEENAGE MUTANT TURTLES	39
GALACTIC FRONTIER	15
TORCHBEARER	15

AMIGA

GAUNTLET 3D	62
GODS	62
ISHIDO	62
KING'S QUEST TRIPLE PAK	109
LES SUI LARRY TRIPLEPAK	109
MONOPOLY	72
PGA GOLF	62
PANZER KICK BOXING	62
PENTHOUSE JIGSAW (R RATED)	48
PREDATOR 2	62
PRO TENNIS TOUR II	62
QUEST FOR GLORY II	79
RAILROAD TYCOON	79

GENERAL BUSINESS

CITY DESK V2 0	95
EASY LEDGERS	369
EXCELLENCE	209
MAXPLAN	59
PEN PAL	175
P H A S A R V4	93
SUPERBASE PERSONAL 2	115
S/BASE PRO V4 (NEW)	579
THE ADVANTAGE	258
WORKS PLATINUM	175

EDUCATIONAL

BIBLE READER KJV	65
BIBLE READER NEW INT VER	85
LINKWORD EACH	43
MAVIS BEACON TYPING	65
MATHS VISION	275
WHERE IS CARMEN SD EACH	65
YOUR FAMILY TREE V2 1	85

ENTERTAINMENT

BACK TO THE FUTURE 3	65
CAR VUP	56
DAS BOOT	75
EUROPEAN SOCCER LEAGUE	55
EXTERMINATOR	65
FAMOUS 5 TREASURE ISLE	65
FAST EDDIE'S POOL	45
FEUDAL LORDS	65

CREATIVITY/GRAPHICS

3D PROFESSIONAL	339
DRAW 4D	329
PRINTMASTER PLUS	55
SPECTRACOLOUR	109
TURBO SILVER	169

UTILITIES/LANGUAGES

64 EMULATOR 2 A500/2000	99
AMI ALIGN SYSTEM	49
AREXX	65
AZTEC C DEV PAK V5	375
ASSEMORO	143
BBC EMULATOR	109
DOS 2 DOS	69
DUNLOP UTILITIES	79
LATTICE C++	299
PELICAN PRESS	139
POWER WINDOWS 2.5	115
PROJECT D V2	75

SOUND/MUSIC

BARS AND PIPES	249
DR T MIDI REC STUDIO	89
DR T COPY APPRENTICE	139
PERFECT SOUND 500 2000	169
SONIX	79

ENTERTAINMENT: CALL FOR PRICES
ALL TOP TITLES AT ROCK BOTTOM PRICES

All in stock items shipped the same day. Please allow 14 working days for delivery of out of stock items. Should your product be faulty please return disk only & copy of receipt for immediate free replacement. COD also available. Prices are subject to change without notice.

NAME.....PH (.....)
ADDRESS.....
CITY.....STATE.....POSTCODE.....COUNTRY.....
DESCRIPTION.....QUANTITY.....EACH.....TOTAL.....

BK/CARD/MASTERCARD/VISA NO. EXPIRY DATE

Cheques payable to Briwall Australia

SIGNATURE.....

COMPUTER TYPE:.....

SUB-TOTAL \$.....

POSTAGE \$ 4.00

GRAND TOTAL \$.....

For complete list of products & prices, please tick AMIGA () C64/128 ()

What's a Wordworth Anyway?

Just when you thought you were all WYSIWYG'ed out, a new entry to the fray of heavy duty graphic interfaces has turned up. Wordworth looks great for a first release. **Andrew Farrell**, wordprocessing guru, examines the package.

Between *ProWrite*, *Pen Pal* and *Excellence* it looked like the WYSIWYG market had stabilised. Not so. Although offering some fine features, the big three previously available WYSIWYG word-processors still compromised on key features. Enter *Wordworth*. A slick new package which for a version 1.0 release stands up well to all the current choices.

Inside the bookshelf box you'll find three disks, a 266 page ring-bound manual and quick-reference card. A function key guide on a sticker may be cut out and placed near the relevant keys. Installation is a snack. There are no external assigns to worry about.

Up and running

On screen, *Wordworth* looks every bit like a true Workbench 2.0 application. System menus, including pull down functions and requestors, all sport some sort of fancy font. This help makes things more readable, however on occasion the menus seemed to become a little confused with some letters overlapping others.

The display may be interlaced if you desire (flicker fixer recommended) and the number of colours can be changed even whilst you're in the program. There are a number of preset palettes too. Overall, I found I was able to make *Wordworth* look just the way I wanted - well, almost.

Like all of these programs, the toughest thing always seems to be finding a font that not only looks good and is readable on the screen but also prints correctly. As usual, I found the default fonts for correct handling of in-built printer fonts to be too small for continuous on screen use. So, I reverted to using 15 point Times for entering text, and then once it was corrected, spell-checked and edited, reverting back to the propor-

tionally correct font. This is a fairly simple process.

Incidentally, *Wordworth* can be adjusted to correctly display WYSIWYG representations of both 60 and 80 DPI output. It will not properly handle laserjet as yet, although there is some support in this area. They tell us postscript output is also on the way. I wait in earnest. New Horizons are also busy adding postscript to *ProWrite 3.0*. *Excellence* enjoys this feature now, but it is rather tricky to get working reliably.

Editing and formatting

Editing speed is great as are the range of editing keys and functions. *Wordworth* actually supports the Home, End, PgUp and PgDn keys too. There are icons to handle such things as line spacing, justification, font and colour selection, margins and tabs. There is a very strong set of keyboard short-cuts. Many of the pull-down menus cause pop-up radio button menus to appear. A very pleasing interface which you can zoom around after just a few minutes exploration.

Extensive control over page formatting is offered including all margins, headers and footers. There is no footnote facility. Paragraphs can be formatted individually including justification, indentation, TABs, line spacing and space before and after a paragraph. Certainly a lot more fancy than most wordprocessors and even up there with some of the better desktop publishing programs. There is no support for multiple columns at the moment - this too is a planned addition in a coming release.

Wordworth supports standard Amiga typefaces as well as colour fonts for which you'll need the *ColourFonts* program included with *Deluxe Paint*. The main menu to select a font is a pop up re-

questor which shows the font name, drawer, point size and tracking (character spacing). You can enter any point size, however only Workbench 2.0 will guarantee a smooth rendition of the typeface - earlier versions are limited to those sizes available or chunky versions of scaled sizes. (Full support for outline fonts has been added to Workbench 2.0 which is now ready to ship!) Styles available include the usual bold, italic and underline. There is also support for super and subscript.

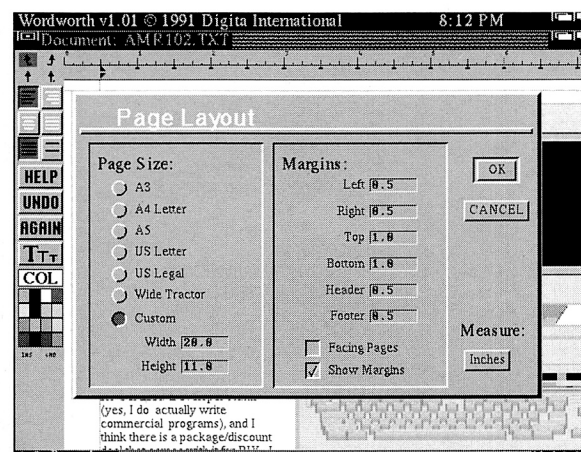
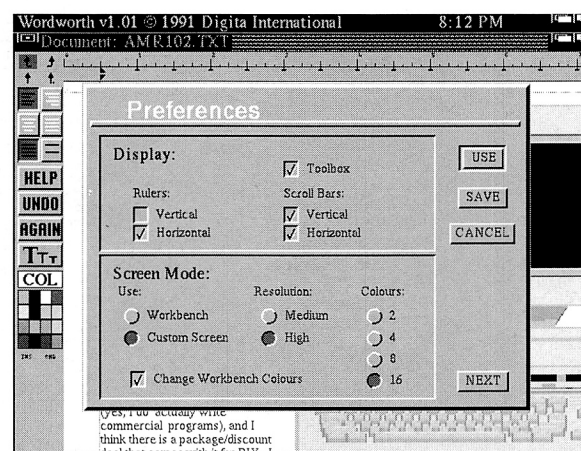
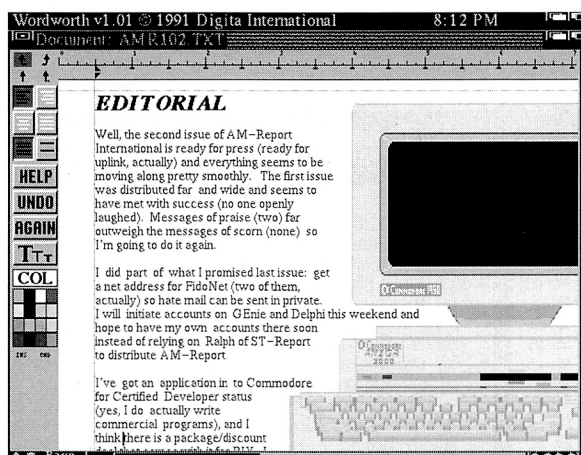
Graphics

When it comes to including IFF images, *Wordworth* scores very well. The place picture option will import any standard Amiga IFF graphic in any resolution or size from 2 to 64 colours, HAM or Extra Half Brite. HAM images are converted to 64 colour Extra Half Brite. The current palette can be altered to reflect the graphics palette (colours 4-16 of the current palette are adjusted to reflect the most used colours in the graphic), or the palette of the imported graphic can be adjusted to best match the current settings. *Wordworth* handles this process quiet well, be it with a short delay whilst all the necessary calculations take place.

Text can be made to flow around the graphic to the left or right. If colour 0 is selected to be transparent you can also have contoured text flow around the image. You can resize the image using simple drag handles. Holding the shift key as you drag will maintain the correct aspect ratio. A double click on the image brings up a useful picture options menu much like any good desktop publishing program.

Output

Apart from the standard NLQ or draft mode, graphic mode provides support for the Amiga fonts and graphics. *Wordworth* comes with special fonts to correctly represent the NLQ fonts on screen in true WYSIWYG form. There is also a special output mode known as Ultraprint. This effectively doubles or quadruples



the screen resolution which is dumped to the printer in a graphic print mode.

The catch is any font used must be available in either double or quadruple size to use this option. For example an 8 point Times font printed in Ultraprint High (double) would require Times 16 point to be available before the document could print. In Ultraprint Super

(Quadruple) you would need Times 32 point. The result of this output mode is impressive, but the printing is considerably slower. Not a bad alternative to a similar feature provided by *Kindwords 2.0*.

NLQ and Amiga graphics may be mixed using a special two pass function. The output menu helps with all this by giving full control over the usual preference settings which affect printer output including the printer driver. Changes made in the program are reflected in preferences normal system configuration file.

"Smart" Features

Wordworth has a number of features which overcome several long standing problems with these types of wordprocessors. If this is an upgrade you're probably first concerned with converting your old format files across to *Wordworth*. This is handled elegantly by the document format menu which offers compatibility with ASCII, *ProWrite*, *WordPerfect*, IFF Text (such as *Kindwords*) and *Protext*.

Another favourite *Wordworth* overcomes is the fact that some printers are only 60 DPI. This normally means you can look forward to 1/4 of the screen not printing correctly if at all. However, *Wordworth* offers a choice between print resolutions of 60 or 80 DPI and adjusts the screen display accordingly. I wonder how they will handle 300 DPI

printers correctly.

Occasional system crashes can be thwarted with *Wordworth's* auto-save option. You can set the amount of time between saves. The save function creates a backup before replacing the existing file enabling you to revert back to an earlier version of your file.

The William Collins spelling checker contains 116,000 words including 26,000

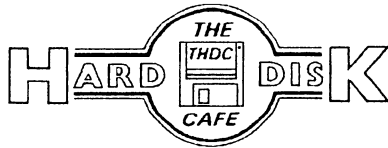
words from the Marriam-Webster legal and medical supplements. However, it's very easy to add words to the dictionary. When a word is queried you have the option to edit it, replace it from the near-match listing of words, ignore it or add the word to the user dictionary. This dictionary is automatically updated and reloaded each time you run *Wordworth*. The spell-checker can work as you type - although this requires a hard disk or copying the dictionary to RAM. Spelling suggestions are based on both phonetic spellings and common mis-spellings. I found the dictionary was a very useful function, especially once it contained my commonly used computer terms.

There is also a good thesaurus and document analysis. You can also create a glossary of commonly used terms or phrases which are then quickly accessible from a pop up menu. *Wordworth* handles hyphenation quite well. It even has a smart speech option to read portions of text or read as you type. There's full control over the synthesiser. Under *Workbench 2.0* it sound great!

Conclusion

Wordworth is a functional well thought out package that will no doubt become the standard by which others are judged. Although suffering from the usual confusing WYSIWYG problems of font sizes and line spacing, once you have correctly configured your page, fonts and printer preferences all should be well. The documentation is of a very high standard. If all the promised additions arrive as scheduled *Wordworth* will go on to stake a large claim in the high end Amiga wordprocessing market. Top points for look and feel. A very useful spell checker, combined with a number of smart features make this one a desirable alternative to *Excellence* or *Pen Pal*.

Distributed by:
Pactronics
(08) 748 4700
RRP \$299



Phone:
(02) 979 5833
Fax:
(02) 979 6629

AUTHORISED

GAMES

A P B	\$49.95
* ACTION STATIONS	CALL
ADVANCED TACTICAL FIGHTER II	\$69.95
ALL DOGS GO TO HEAVEN	\$69.95
AMOS GAME CREATOR	\$125.00
ART OF CHESS	\$16.95
ASTRO MARINE CORPS	\$69.95
ATOMIX	\$49.95
AWESOME + T-SHIRT	\$79.95
BADLANDS	\$69.95
BARDS TALE III	\$59.95
BATMAN - CAPED CRUSADER	\$45.00
BATTLE COMMAND	\$59.95
BATTLE SQUADRON	\$59.95
BATTLE VALLEY	\$49.95
BERLIN - EAST V WEST	\$59.95
BATTLE STORM	\$79.95

MAL'S NEW GAMES

☆ ARMOUR GEDDON ☆
☆ RAILROAD TYCOON ☆
☆ TOKI ☆

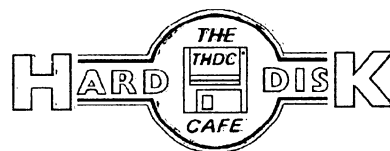
BIO CHALLENGE	\$49.95
* BIRDS OF PREY	CALL
BLITZKRIEG STRATEGY	\$79.95
BLOCKBUSTER PAK - SSI	\$59.95
BLOODWYCH	\$59.95
BLUE ANGEL 69	\$49.95
BLUE MAX	\$69.95
BOMBER BOB	\$59.95
BORODINO	\$49.95
BRAIN SCRAMBLER - JIGSAW	\$29.95
* BRAT - NEW	CALL
BREACH 2	\$59.95
B.S.S. JANE SEYMOUR	\$69.95
BUBBLE BOBBLE - 2 CAN PLAY	\$59.95
CONQUESTS OF CAMELOT (SIERRA)	\$59.95
CARTHAGE	\$69.95
CASTLE WARRIOR	\$69.95
CHAOS STRIKES BACK	\$59.95
CHARIOTS OF WRATH - SPECIAL	\$49.95
CHESS PLAYER 2150	\$69.95
CHRONO QUEST II	\$79.95
CINEMAWARE COMPILATION (ROCKET RANGER 3 STOOGES SINBAD)	\$49.95
CODENAME ICE MAN (SIERRA)	\$59.95
COLONEL'S BEQUEST	\$59.95
COLORADO	\$69.95
COMMANDOS PACK	\$59.95
CONTACT	\$59.95
CRAZY SHOT - USES GUN/MOUSE	\$49.95
CROSSWORD CONSTRUCTION SET	\$59.95
CROSSWORD CREATOR	\$59.95
CYBERBALL	\$49.95
CYBERWORLD	\$59.95
DAMOCLES	\$49.95
DANGER FREAK	\$59.95
DARIUS +	\$49.95
DARK CENTURY	\$59.95
DARK SIDE	\$49.95
DAS BOOT - U-BOAT SIM - GREAT!	\$69.95
DAY OF THE PHAROH	\$54.95
DAY OF THE VIPER	\$59.95
DEMONS TOMB	\$54.95
DEMONS WINTER	\$45.95
* DEUTEROS - NEW	CALL
DR. PLUMMET'S HOUSE OF FLUX	\$49.95
DR. DOOMS REVENGE - SPECIAL	\$49.95
DRAGON FLIGHT	\$79.95
DRAGON SPIRIT - SPECIAL	\$39.00
DRAGONSTRIKE	\$59.95
DREAM ZONE	\$39.95
DUCK TALES - QUEST FOR GOLD	\$59.95
DUNGEON MASTER 1 MEG ONLY	\$59.95
DYNASTY WARS	\$59.95

DYTER 07	\$49.95
EMPEROR OF THE MINES	\$49.95
EMPIRE	\$59.95
ESCAPE - From planet robot monsters	\$49.95
ESKIMO GAMES	\$49.95
EUROPEAN DREAMS - COMPILATION	\$59.95
EXTERMINATOR	\$69.95
EXTRA TIME - FOR KICKOFF	\$59.95
EYE OF THE BEHOLDER	\$59.95
F-19 STEALTH FIGHTER	\$89.95
FA18 INTERCEPTOR	\$45.95
FALCON MISSION DISK	\$49.95
FACES TRIS III	\$59.95
FIENDISH FREDDY - SPECIAL	\$49.00
FIGHTER BOMBER MISSION DISK	\$59.95
FLIPPIT + MAGNOSE	\$59.95
FORGOTTEN WORLDS - SPECIAL	\$49.95
FUSION	\$45.00
FUTURE BIKE (SIM)	\$39.95
FUTURE DREAMS - COMP	\$59.95
* GALACTIC EMPIRE	CALL
GLOBULOUS	\$59.95
GODS	\$69.95
GOLD OF THE AZTECS	\$59.95
GOLDRUSH - SIERRA	\$61.95
GRAND NATIONAL (Horses)	\$49.95
GRAND SLAM TENNIS	\$16.95
GREMLINS 2	\$59.95
HARPOON	\$69.95
HARPOON BATTLE SET 2 NTH ATLANTIC	\$49.95
HARPOON BATTLE SET 3 MEDITERRANEAN	\$49.95
HARPOON SCENARIO EDITOR	\$49.95
HEWSON'S PREMIER COLLECTION	\$49.95
HILLSFAR - DUNGEONS & DRAGONS	\$45.95
HONDA RVF - PLAYS WELL	\$49.95
HOYLES SOLITAIRE VOL 2	\$69.95
HOYLES SOLITAIRE VOL 1	\$59.95
HUNT FOR RED OCTOBER	\$44.95
IMPERIUM	\$49.95
INDIANA JONES LAST CRUSADE	\$49.95
INDY 500	\$49.95
INFESTATION	\$59.95
INTERPHASE	\$59.95
ISHIDO	\$69.95
JACK NICKLAUS COURSE DESIGNER	\$79.95
JACK NICKLAUS ULTIMATE GOLF	\$59.95
JACK NICKLAUS VOL 3	\$49.95
JET INSTRUMENT TRAINER	\$99.95
JOKER X-WORD	\$19.00
JUPITER MASTER DRIVE	\$69.95
KEEF THE THIEF - ADVENTURE	\$45.95
KELLY X	\$19.95
KHALAAN	\$59.95
KICK OFF - EXTRA TIME	\$59.95
KILLING GAME SHOW	\$69.95
KINGS BOUNTY	\$49.95
KINGS QUEST I	\$49.95
KINGS QUEST II	\$69.95
KINGS QUEST III	\$69.95
KONIX SPEEDKING JOYSTICK - GREAT	\$39.95
LEGEND OF FAERGAIL - MAL LIKES IT	\$69.95
LEISURE SUIT LARRY	\$49.95
LEISURE SUIT LARRY II	\$49.95
LEISURE SUIT LARRY III	\$59.95
LEMMINGS - DARE YOU TO PUT IT DOWN	\$69.95
LITTLE COMPUTER PEOPLE	\$19.95
LOTUS ESPRIT TURBO CHALLENGE	\$69.95
M1 TANK PLATOON	\$89.95
MANHUNTER - NEW YORK (Sierra)	\$49.95
MANHUNTER 2 (San Francisco)	\$59.95
MANNIX	\$59.95
MATRIX MARAUDERS	\$59.95
MAYDAY SQUAD	\$49.95
MEGATRAVELLER	\$79.95
MICROPROSE SOCCER	\$59.95
MIDNIGHT RESISTANCE	\$59.95
MIDWINTER	\$79.95
MIGHT & MAGIC II	\$59.95
MR. HELI - SPECIAL	\$49.95

MUDS	\$59.95
MURDER	\$59.95
MYSTICAL	\$69.95
NEUROMANCER	\$59.95
NIGHT BREED ACTION	\$59.95
NIGHT HUNTER	\$59.95
NUCLEAR WAR	\$49.95
OIL EMPORIUM	\$54.95
ONSLAUGHT	\$49.95
OPERATION COMBAT	\$79.95
OPERATION HARRIER	\$59.95
ORIENTAL GAMES	\$69.95
OVERRUN	\$49.95
PANG	\$59.95
PERSIAN GULF INFERNO	\$69.95
PGA TOUR GOLF	\$59.95
PHANTASM	\$29.95
PHASER GUN - SPECIAL	\$39.95
PICTIONARY	\$45.95
PIPE MANIA	\$59.95
PLOTTING	\$59.95
POLICE QUEST	\$61.95
POLICE QUEST 2	\$61.95
POPULOUS	\$39.95
POWERDROME	\$49.95
POWERDRIFT	\$59.95
POWERMONGER	\$49.95
PRO TENNIS TOUR 2	\$69.95
PROJECT YLE	\$45.95
PUFFY'S SAGA	\$59.95
PURPLE SATIN DAY	\$49.95
PUZZNIC - ADDICTIVE	\$59.95
QUADRALIEN	\$69.95
QUARTZ	\$49.95
RAILROAD TYCOON	\$89.95
RAINBOW WARRIOR	\$59.95
RED LIGHTNING	\$54.95
REALM OF THE TROLLS	\$61.95
RICK DANGEROUS 2	\$59.95
ROADWARS	\$19.95
ROGUE TROPPER	\$64.95
RVF HONDA	\$49.95
SAFARI GUNS	\$49.95
SCRAMBLE SPIRITS	\$49.95
* SECRET OF SILVER BLADES	\$59.95
SIM CITY	\$84.95
SIM CITY TERRAIN EDITOR	\$34.95
SIM CITY GRAPHICS 1 - ANCIENT CITIES	\$59.95
SIM CITY GRAPHICS 2 - FUTURE CITIES	\$59.95
SIMILCRA	\$49.95
SKYCHASE	\$39.00
SLEEPING GODS LIE	\$59.95
SOLITAIRE - VOL 2 CALCULATION	\$39.95
SOLITAIRE - VOL 3 ACCORDION	\$39.95
SPACE RACER	\$49.95
SPACE SCHOOL	\$39.95
SPACE QUEST	\$44.95
SPACE QUEST II	\$59.95
SPACE QUEST III	\$59.95
SPY V SPY - ARCTIC ANTICS	\$16.95
STAR BREAKER	\$49.95
STAR CURSOR J/S - 3 YR GUARANTEE	\$54.95
STEEL	\$49.95
SUMMER OLYMPIAD	\$29.95
STORM ACROSS EUROPE	\$49.95
STRIDER II	\$59.95
STUN RUNNER	\$69.95
SUPER SQWEEK	\$59.95
SUPREMACY - NEIL LOVES IT	\$69.95
* SWITCHBLADE II	CALL
SWIV - SILKWORM SEQUEL	\$69.95
T M N TURTLES	\$69.95
TEAM YANKEE	\$89.95
THE BIG ONE - LOTTO SYSTEMS	\$19.95
THE COLONELS BEQUEST	\$59.95
THE HOUND OF SHADOW	\$49.95
THEME PARK MYSTERY	\$59.95
THRILL OF WINNING VOL II	\$59.95
THUNDERSTRIKES	\$59.95

COMMODORE

Phone:
(02) 979 5833
Fax:
(02) 979 6629



TIME MACHINE	\$59.95
TOTAL ECLIPSE	\$49.95
TRACKSUIT MANAGER - SOCCER	\$39.95
TV SPORTS FOOTBALL	\$69.95
* TOKI - NEW	CALL
TOM AND THE GHOST	\$69.95
TWLYTE	\$16.95
TURRICAN II	\$69.95
ULTIMA V	\$79.95
ULTIMA IV	\$79.95
* ULTIMATE RIDE	CALL
VAXINE	\$59.95
VOYAGER	\$59.95
WAR GAME CONSTRUCTION SET	\$49.95
WARLOCK - THE AVENGER	\$59.95
WHITE DEATH STRATEGY	\$79.95
WICKED	\$59.95
WINGS OF DEATH	\$49.95
WINNERS ITALY 1990 SOCCER	\$49.95
WINGS OF FURY	\$69.95
WOLF PACK	\$79.95
WONDERLAND	\$79.95
WORLD TOUR GOLF	\$45.95
WRATH OF THE DEMON	\$89.95
XYBOTS	\$45.95
ZAK MC KRACKEN	\$52.95

PRODUCTIVITY

3-D PROFESSIONAL (WITH VIDEO)	\$350.00
A TALK 3 - SPECIAL	\$69.95
ALL IN ONE - BY GOLD DISK - NEW	\$99.95
A-MAX - SPECIAL III	\$149.95
AMIGA POST CODE	\$49.95
AMIGA VISION - SPECIAL	\$150.00
AMOS	\$125.00
ART DEPT PROFESSIONAL	\$349.00
ART PARTS - FOR DPAINT 3	\$49.95
ASSEMBRO	\$149.00
AUDIO ENGINEER S/WARE/H/WARE	\$CALL
BROADCAST TITLER V2 PAL - the best!	\$450.00
CONTACT	\$59.95
CROSS DOS - V4.0	\$64.95
CYGNUS ED PRO	\$129.95
DELUXE MUSIC CONSTRUCTION SET	\$99.00
DELUXE PAINT III	\$99.00
DELUXE PHOTO LAB (POSTERS TOO)	\$99.00
DELUXE PRINT II	\$99.95
DELUXE VIDEO III	\$99.95
DESKTOP BUDGET - SPECIAL	\$49.95
DIGIPAIN 3 *	\$135.00
DIGIVIEW GOLD 4	\$269.00
DISTANT SUNS	\$99.95
DIRECTORY OPUS VER 2 - HOT	\$49.95
D J HELPER	\$59.95
DYNACADD	CALL
DYNACADD DEMO	\$15.00
EASY LEDGERS (WITH JOB COSTING)	\$499.00
EASY LEDGERS ACCOUNTING	\$375.00
ECLIPS - PRO DRAW/PAGE CLIP ART	\$139.00
ELECTRIC THESAURUS	\$69.95
ELECTRONICS DEBTORS SYSTEM	\$299.00
FLASHBACK - HD BACKUP - NEW	\$79.95
GOLD DISK TYPE - DECORATIVE	\$79.95
GOLDSPELL 2	\$44.95
G.P. TERM - TERMINAL PROGRAM	\$99.00
HAM IT UP - WORKS WITH DPAINT	\$69.95
HEADLINE FONTS 1	\$99.00
HEADLINE FONTS 2	\$99.00
HEADLINE FONTS SUB	\$99.00
HOME BUILDERS CAD	\$299.00
HYPERBOOK	\$139.95
IMAGINE - HOT - NEW - RAYTRACING	\$399.00
INTERCHANGE S/N	\$79.95
INTROCAD	\$99.00
KARA ANIM FONTS	\$79.95

KINDWORDS	\$69.00
LATTICE C V5	\$399.00
LINKWORD FRENCH	\$59.95
LINKWORD GERMAN	\$69.95
LINKWORD ITALIAN	\$59.95
MAC TO DOS:	\$189.00

NEW & HOT

☆ HAM E PLUS ☆

☆ THE MIRACLE ☆

PIANO TEACHING SYSTEM

FROM MINDSCAPE

THIS WILL BE A HIT

MICROFICHE FILER	\$599.95
MICROFICHE FILER PLUS	\$199.00
OUTLINE FONTS FOR PRO PAGE	\$269.00
PAGESTREAM FONTS VOL 1.1	\$59.95
PAGESTREAM V2.0	\$299.00
PHOTON PAINT V2 - HAM PAINT	\$199.00
PIXMATE	\$89.95
PRINTMASTER ART GALLERY 1	\$49.95
PRO VIDEO FONTS (SET 2)	\$149.00
PRO VIDEO POST	\$399.00
PROFESSIONAL DRAW V2.0*	\$275.00
PROFESSIONAL PAGE - SPECIAL	
PROF PAGE - STRUCTURED CLIPART	\$79.95
PROF PAGE TEMPLATES	\$79.95
PROFESSIONAL PAGE V2 + VIDEO	\$399.00
PROMOTION	\$119.00
PROWRITE V3.0	\$199.00
PROWRITE - GERMAN DICTIONARY	\$49.95
PROWRITE - PROFONTS 1 (extra fonts)	\$49.95
PROWRITE - PROFONTS 2 (extra fonts)	\$49.95
QUARTERBACK (HD BACKUP)	\$99.00
QUARTERBACK TOOLS	\$99.00
QUICKWRITE - WORD PRO - good one	\$99.95
REEL 3-D NEW FAST RENDERING	\$899.00
SCALA	\$699.00
SCENE GENERATOR	\$74.95
SEASONS & HOLIDAYS CLIP ART	\$49.95
SPRITZ PAINT PROG	\$99.95
SUPERBACK	\$99.95
SUPER DJ	\$34.95
SYSTEM 3 (ACCOUNTS)	\$129.00
THE ART DEPARTMENT	\$129.00
THE DIRECTOR	\$99.00
THE OFFICE - GOLD DISK	\$399.00
TV TEXT PROFESSIONAL	\$259.00
ULTRA CARD PLUS	\$145.00
VIDEO TOOLS	\$299.00
VIDI AMIGA F/GRABBER B/W LO-RES	\$399.00
WALT DISNEY ANIMAT'N STUDIO - Hot	\$249.00

MUSIC

AUDIO ENGINEER JUN	\$189.00
BARS AND PIPES	\$299.00
BARS AND PIPES PROFESSIONAL	\$450.00
BARS AND PIPES EXTRA MODULES	\$CALL
DELUXE MUSIC CONSTRUCTION SET	\$99.95
DR T'S COPYIST APPRENTICE	\$149.00
DR T'S COPYIST DTP	\$449.00
DR T'S PHANTOM (SYMPTTE SYNCH)	\$CALL
DR T'S TIGER CUB	\$119.00
FUTURE SOUND - (STEREO DIGITISR)	\$299.00
HARMONI	\$149.95
KAWAI FUN LAB KEYBOARD - \$100 off	\$895.00
KEYBOARD EDITORS	\$CALL
MIDI MAGIC	\$299.00
MIDI INTERFACE	\$89.95
MUSIC X - STILL THE BEST	\$299.00
MUSIC X JUNIOR	\$CALL

PERFECT SOUND 3.0	\$199.00
SONIX 2.0 - MUSIC	\$99.00



CDTV TITLES

A BUN FOR BARNEY BEAR -	
THIS ONE IS GOOD	CALL
ADVANCED MILITARY SYSTEMS	\$59.95
ALL DOGS GO TO HEAVEN	CALL
BATTLESTORM	CALL
CD REMIX	CALL
FRED FISH - CDTV - THIS IS NEAT -	
480 DISKS	\$99.00
GARDEN FAX - GROW AND CARE FOR	
OVER 400 VARIETIES	CALL
LEMMINGS	CALL
MIND RUN	CALL
** MUSIC MAKER - CDTV	CALL
MY PAINT - FOR KIDS	CALL
PSYCHO KILLER	CALL
SIM CITY	CALL
THE HOUND OF THE BASKERVILLES	CALL
THE ILLUSTRATED AMERICAN	
ENCYCLOPEDIA DICTIONARY	CALL
THE ILLUSTRATED WORKS OF	
SHAKESPEARE	CALL
TIMETABLE OF BUSINESS	\$79.95
TIMETABLE OF SCIENCE	\$79.95
WOMEN IN MOTION	\$CALL
WORLD VISTA	\$99.95
WRATH OF THE DEMON	\$99.95
** XENON II	CALL

ALL TITLES ARE IN STOCK AT TIME OF
DEADLINE EXCEPT FOR ONES MARKED
** NOT IN STOCK YET

**WATCH THIS SPACE - LOTS MORE TO
FOLLOW NEXT MONTH, A LIST OF
MUSIC CD'S PLUS GRAPHICS - (CD+G)**

THANKS

*I'D LIKE TO THANK ALL THE
GUYS WHO WORKED
EXTREMELY HARD ON THE
H.D.C. STAND AT THE W.O.C.
SHOW.*

*I'D ALSO LIKE TO THANK
EVERYONE WHO MADE A
SPECIAL EFFORT TO VISIT US
FROM ALL STATES IN OZ, NEW
ZEALAND, FIJI AND EVEN
DOWNTOWN MONA VALE. HI
FRED!*

THANK YOU!

*IT WAS GREAT FUN MEETING
ALL THE OVERSEAS VISITORS.*

*GOOD LUCK TO GEOFF
McCAULEY,
EX COMPUTERMATE
ALL THE BEST IN THE WEST, TO
YOU & THE FAMILY, GEOFF*

Getting into Desktop Video with *Alter Image*

by George Kimpton

No longer does the video enthusiast have to dream about the wondrous masterpieces possible if only you could afford a genlock. In the last couple of years we have seen three which have cost less than \$1000.

First there was Dave Thompson's Ausgen at around \$600 and more recently I reviewed the ROCGEN which currently retails at less than \$300. Now we have the Alter Image Genlock by The Disk Company retailing at around \$749. Incidentally Matrix inform me that they have fixed the problems with the Roc-Gen I found - so it should now represent a great buy.

Installation

Have you ever got caught up in that party game where you unwrap the parcel layer by layer and eventually find that the prize is one tenth the size of the original package. Well that is what I felt like. I was presented with this large package which conjured up visions of lots of goodies inside and instead I found lots of wasted space and packing and eventually the promised items.

The actual genlock is only 120 x 56 x 38 mm with a 23 pin connector at each end, to suit your monitor, and two RCA connectors for video in and out. A three way manual toggle switch is used to se-

lect the monitor viewing modes (video only, graphics only and mixed). A very compact unit indeed but I worry about its weight hanging off the monitor output connector. I would suggest some support under it to protect the motherboard connections.

No longer does the video enthusiast have to dream about the wondrous masterpieces possible if only you could afford a genlock. In the last couple of years we have seen three which have cost less than \$1000!

Apart from the genlock itself there are two program disks (*AlterImage* and *Fusion Paint*), one font and one clip art disk and two manuals. A rather thin booklet tells you how to connect up the genlock system. The other is the operating manual which is fairly comprehensive with tutorials to get you going both with the genlock and with *Fusion Paint* which is included in the package to help in art work.

In addition, and I must congratulate the Disk Company on the excellent 15 minute instructional video on genlocking to supplement the manuals. It takes you

through setting up the hardware and producing titling step by step. It's a pity more software houses don't do this to help you learn how to use some of the more complex programs on the market today.

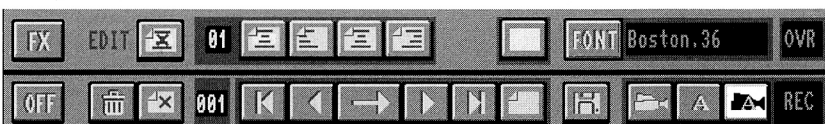
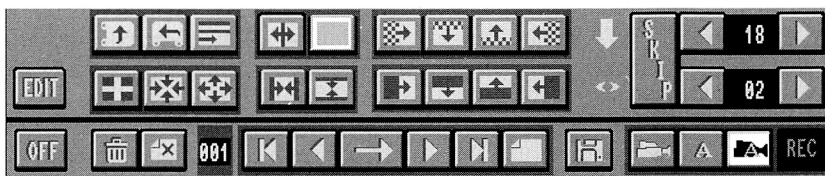
If videos like these were available for viewing before buying there may be less dissatisfied customers as they would know what they were getting. There may also be less piracy if people already knew the program would not do what they wanted.

The included *Alter Image* program is intended for use with the genlock supplied but just for curiosity I tested some other titling programs with this genlock quite successfully. The only problem I did find was an instability of the screen display on my A2500 without any video input but this is fairly normal when working with genlocks without any sync to lock onto.

The *Alter Image* program is self booting and can be used from the floppy or be installed on a hard disk by clicking on an install icon after a normal boot and then adding two lines to the startup sequence. I may be getting into hot water here but, while the *Alter Image* genlock is said to work with all versions of Amiga, there may be some reservations in certain configurations with software mode switching but more about this later.

It is a fairly basic program which is easy to use, just point and click on the tool box or control panel as it is called at the bottom of the screen and away you go. The tool icons are fairly standard and easy to recognised after a short familiarisation run through them and the control panel is toggled with a click of the right mouse button.

On opening you are told to expect some instability of the screen until the video source is started up and running. In actual fact, normal practice in video genlocking requires you to first start up the



video sync source then the genlock before starting the Amiga to allow the Amiga to lock on to the video sync. This is always a good routine to get into.

Operation

To enter your text you are given the choice of a number of fonts specially made for Alter Image. No other fonts will be accepted which is rather limiting. The fonts you select are loaded into RAM and remain there until removed. It is possible to select any one of eight adjustable colours for the fonts but you can not play around with shadows, outlines etc. as these are fixed for the font you select.

Centre, left or right justification of text in each line is set by clicking on the appropriate button. If want another page or you are not happy with the old one it is just a matter of clicking a button again. As I said very easy to use every thing is just a matter of clicking on the mouse button except for typing in the text.

The Graphics Box Button allows you to create many graphic elements such as boxes, rules, frames, colour backgrounds and combinations of all these.

It is possible to use this facility to create a contrasting colour box as a background to your text but the box is constrained to 200 lines vertically. This constraint applies to all graphics that you draw or import. One very handy feature though is the Delete Graphics Button which allows you to remove the graphic whilst leaving the text intact if you want to change your mind.

The graphics can be imported from the included *Fusion Paint* or any other Paint program provided the format is Hi-Res and IFF, but not HAM. Also, remember the 200 line constraint when producing graphics.

Each page can be given its own transition by selecting the FX button which opens up another control panel on which are displayed the various transitions. Horizontal and vertical scrolls are provided along with "Teletype" which lays the letters down, left to right, just as you would read them.

Other transitions allow wipes, cross reveals, shrinking square, expanding square, closing and opening doors, blinds, checkerboard and diagonal

changes to the screen. They are fairly basic but effective, after all this is not intended for use in a professional studio but for home use. The speed and dwell are adjustable for each page to suit your needs. The script which controls the pages you create can be saved to disk for later use.

When you have completed your script you are advised to add a blank page at the end for control purposes. I found I needed two blanks otherwise I was suddenly confronted with my control panel back on screen when there should have been nothing but video.

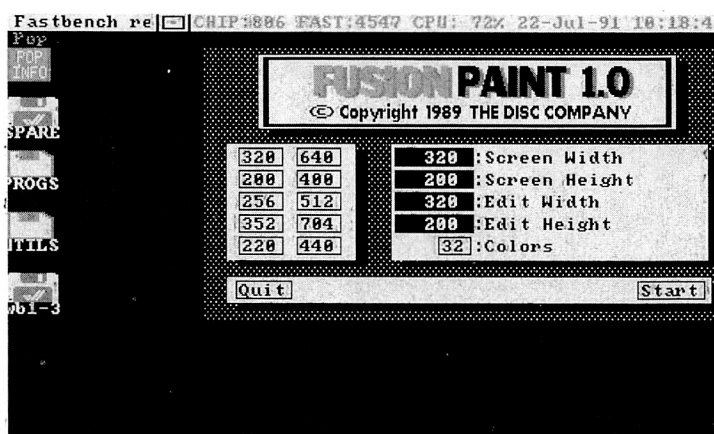
So, you have created your tiling or credits and now you want do something with them. Well it is possible to view individual pages as you did when setting them up. The current page number is displayed in the control bar and by using the appropriate buttons you can step through the pages holding on the blank to avoid the return of the control panel.

Problems

Now this could be where I get into trouble but I say it as I see it. The software provides for mouse control of the genlock on any Amiga model as to whether you see just video or Amiga graphics or the combined video and graphics by clicking on the appropriate button on the control panel. This is a very useful feature if you get it to work.

There was no way I could get this to happen on my A2500, I could only switch manually on the genlock itself. I must say here that manual switching was flawless and gave no problems except for the need to keep reaching around the back of my computer to switch modes. In all fairness the problem may be with the configuration of my system.

It was suggested that the software did not like my hard disk (GVP controller and Quantum Drive) but switching out the hard disk brought no changes. Each time I attempted to view only video or



Amiga graphics the control panel kept flickering on and off. The mixed display was always perfect but not the other modes. I even switched out the accelerator without any improvement.

I am reliably informed that the system does work properly on Amiga 500s around which I suspect it was designed judging by the handbook illustrations. It is worth noting here that the manual does indicate the possibility of a problem with A590 hard drives but gives a fix to get around the problem. It is also quite possible that it will work well on other Amigas but make sure it works on your configuration before buying.

Generally though it is a good system for the home video enthusiast. It will give quite effective titles with or without graphics. I would like to see the ability to use fonts other than the Alter Image ones and it would be nice to be able to fade the graphics in or out. Remember too that the genlock itself can be used with other titling programs with manual switching.

Fusion Paint

Fusion Paint is quite a versatile program but not in the same class as *DPaint* or *DigiPaint*. However it does have some different features and it is adequate for producing simple but effective graphics for use in titling home videos. It certainly is not as user friendly to the first time user as is *DPaint*.

The icons in the tool panel do not always indicate clearly what they are used for. In addition many functions only pop up as a secondary toolbox after you have clicked on and selected a main function tool. As an example, clicking on the

freehand drawing icons opens a secondary toolbox which allows you to select from freehand, straight line and straight line horizontal or vertical constrained only.

The boxes and circle tools have similar multiple selections so the problem initially is to find where the various functions hide. I know it took me half an hour to find out how to clear the screen and then I only found it by reading the handbook. Still I suppose that is what we are supposed to do but how many of us read the manual first.

All the usual tools are there, freehand, boxes, circles, airbrush, brush (cuts), cut (for clip art), fill, effects (brush selection and manipulation), text, fonts, magnify, erase, palette and printer. As I said multiple secondary level selections become available on selection of these tools.

It does have some unusual features. Initial screen size is 600 x 400, probably to suit the genlock, and thus you have portions of the screen outside the view-

ing area. Clicking F10 removes the toolbox but you cannot draw without it. Overscan is also supported but you cannot reach drawing tools to select them. The arrow keys are used to scroll the screen around and the return key to centre the page.

Another unusual feature is the ability to magnify the immediate cursor area by holding down the right mouse button. The cursor immediately slows down and a magnified picture of the working area appears below the toolbox. Using the shift key during rubber band drawing of lines, circles, ellipses or curves allows them to be dragged to selected new locations once sized.

The undo command is not limited to a single toggle effect as in *DPaint* and others, it can step back as many levels as the memory buffer will permit. Unfortunately it is one way only, when they are gone they are gone. A feature called Quicksave is used to bypass the usual save requesters. It updates the picture file in a similar way to the hot keys in word

processing which update the active file.

Another useful feature is the ability to select which background colour is transparent when saving a picture. It can be any colour and not necessarily the first colour in the palette as is usual. It is also possible to create icons and alternate icons (Icons that change on selection) and save them as such for future use. A Power Borders facility is also available which allows the creation of borders for the screen using pre-saved patterns.

ColorFonts and colour cycling are supported but the program requires an ARP Library to operate successfully.

Generally it is a good paint program, just different and perhaps not so user friendly as we have come to expect. For anyone still wanting that something extra special in graphics you will still need *DPaint* or one of the others. For the home movie buff however it may give all they need especially as it comes as part of the package. □

Distributed by:

Commodore (02) 427 4888

PUBLIC DOMAIN SOFTWARE

Now available - one of Australia's largest PD collections,

17 BIT, FISH, AMIGAN, AMICUS, T BAG, FAUG, AMAZ, AARUG, AMIGOZ, NZAUG,

and now by time of publication we will have

the AMOS PD from the UK.

Send now for full catalogue (3 disks) \$6.00.

All disks \$5.00 + \$2.00 P & H per order.

Ask about our competitive prices on commercial software.

Bankcard, Mastercard and Visa facilities available

**ALLEN COMPUTER SUPPLIES
432 DORSET ROAD, CROYDON VIC 3136
TEL 03 725 3379 FAX 03 723 1780**

RAMlink

Interface for the C64/128

After many months of promises, CMD have finally released RAMlink, a multi function compatibility interface for the C64/128. So what exactly is a "multi function compatibility interface" ?

First and foremost it is a device that enables those of us that have a RAM expander such as GEORam, or Commodore's 1764/1750 REU to finally make use of this extra memory. It can also be considered as an REU in its own right. For those of us that are fortunate enough to own a CMD hard drive it gives us the ability to use the higher speed parallel data transfer.

Ever since the CMD hard drives were released there has been a "minor war" between CMD owners and Lt.Kernal hard drive owners. Both hard drives have their advantages and of course their disadvantages, the main point in contention appears to be speed. The Lt.Kernal which uses a parallel connection as standard is a lot faster than the CMD which uses a serial interface. As an example a 202 block program will load on the Lt.Kernal in just under two seconds, whereas it takes about 8 seconds to load the same program from a CMD HD with its serial interface. When using a parallel cable between the RAMlink and the CMD HD the speeds are very comparable. The same 202 block program loads in less than two seconds.

This is all very well, but quite frankly because programs load so fast anyway (compared to a 1541 drive with no fast loader) I find that the few second time difference is negligible. I could and would not recommend that a CMD HD owner buy the RAMlink purely for the parallel interface.

Using Georam

The next thing I will tackle is RAMlink's ability to make use of GEORAM and the 1764/1750 REU's. I have no doubt that there are many of us that have a RAM expander of some sort, and we would all agree that for the amount of money that it has cost us to purchase the-

se units they get very little use. Geo-RAM owners are probably the worst affected since these REU's can only be used with GEOS. 1764/50 owners are slightly better off in that for the C64 there are about four programs that support their use, and C128 owners are even more better off in that there are maybe a dozen or so programs that we can use.

OK so I admit that 1764/50 owners can use RAMDOS and use the REU as a ramdrive, but I am sure that most of you would have to agree this is often more trouble than it is worth, the moment you do a reset or power down all contents of RAM are lost.

The solution is RAMlink. I don't wish to sound like a salesman, but if you own a GEORAM or 1764/50 REU then this unit is a must because without it you will have some rather expensive RAM just sitting around doing nothing. RAMlink is a device that will allow you to use your existing REU in a fully functional manner.

Power Up

Upon initial power up RAMlink will check for any additional memory, either internal or external, and format itself as another disk drive(s). Thereafter you may copy files to this "disk drive" and access them as if they were on a normal floppy disk, with of course the exception of speed.

Loading from RAM is fast. Those of us that have used RAMDOS with our 1750's would be aware of its limitations, namely if the computer crashes (for any reason) and you do a reset then not only do you lose all data stored in RAM, but you have to reload RAMDOS and start again. To make matters worse RAMDOS is usually unsuitable for use with multi-part programs that load subsequent parts from drive #8, and finally those of us with a C128 often have the need to swap between 64 + 128 modes for various reasons, with RAMDOS the data stored under C64 Ramdos isn't accessible from 128 Ramdos and vice-versa. RAMlink

overcomes ALL of these limitations, and more.

Available RAM

As a storage device the RAMlink operates in a very similar manner to CMD's hard drives. It allows any available RAM to be used in several ways and various partition types, as such you can use its entire memory as a normal but large capacity disk drive (approx 2000 blocks free with a 512k REU). Users of Ramdos will notice a reduction in available memory when using RAM-Link as RAMlink uses some of the memory for its own operation.

The RAM can also be arranged to emulate the 1541/71/81 disk drives, however due to insufficient memory I have been unable to use the 1581 emulation. You are not limited to a single emulation mode, with enough spare RAM you can mix modes by using various partitions (up to 31 partitions are available). With my limitation of only having 512k of RAM I am able to set up two 1541 partitions and can operate the unit with those programs that support dual drives, or I can simply have different applications on each "drive".

Data stored using RAMlink is what I call "semi-permanent", as long as you keep power to RAMlink the data remains intact. RAMlink has its own power supply and ideally should be plugged into a socket that is permanently turned on.

Its power consumption is minimal, and should you happen to lose this power (either accidentally or simply to transport RAMlink to another location/computer, it has a battery back-up (optional) that will hold the RAM contents from several hours to a day or so, depending on the amount of RAM available. I have removed mains power from my unit on several occasions and have never had any problems with data becoming corrupted.

RAMlink comes with its own Jiffy-Dos routines (and DOS wedge) so those of you without JiffyDos would be able to quite cheaply get fast disk speeds from your 1541 drive simply by installing a new drive Kernal chip. Those of us that already have JiffyDos must Disable it when using RAMlink because it causes some strange problems. The RAMlink Jiffydos works in exactly the same way as the normal JiffyDos, but I have no-

Continued on p24

PCM COMPUTERS - FOR *ALL* YOUR AMIGA NEEDS

CHEAP DISKS !!! 3.5" DSDD IN BOX OF 10 \$8-00 PER BOX

POWERCOPY PROFESSIONAL - THE POWER TO COPY ALL - THE ULTIMATE BACKUP UTILITY **\$30**
POWERDEVICE - HARDWARE TO UNLEASH THE FULL POWER OF POWERCOPY **\$60**
BOTH TOGETHER **\$80**

PCM520 2.0 Mb A500 RAM exp. with 0.5 Mb	\$180
PCM501 0.5 Mb A500 RAM exp. with 0.5 Mb	\$85
GVP Accel 22MHz 68030/68882/1MB 32bit RAM/SCSI port	\$1585
GVP Impact 500 series II 40Mb Hard Drive	\$950

Amiga Computers, Monitors, Printers, Hard drives, Accelerators, Memory expansions, Repairs, Modifications, Disk drives, Diskettes, Full GVP range - CALL NOW FOR THE BEST DEAL

PCM COMPUTERS - FOR *ALL* YOUR AMIGA NEEDS

GPO BOX 2363V Melbourne Vic 3001 Phone (03) 822 5873 or 018 322 920 9 am - 9 pm
PO BOX 70 Noble Park VIC 3174 Phone (03) 701 0343 FAX (03) 701 0077

OTHER PCM AGENTS - some prices do not apply to agents. Prices subject to alteration.

J&S Computers PO Box 198 Mentone VIC 3194 Phone (03) 580 6963
Northwest Electronics 5/11 McDougall Rd Sunbury VIC 3429 Phone 744 4440

1084S Stereo Color Monitor	460-00	NEW - A500 INTERNAL Hard Drives	CALL
Tystar 14" Multisync Monitor	720-00	Up to 80 MB - Available Soon !!	
NBC 3D Multisync Monitor	950-00	MICROBOTICS 25Mhz A500 68030 Accel	580-00
3.5" External Disk Drive	165-00		
5.25" External Disk Drive	240-00	Qtronix Mouse (with microswitches)	50-00

A500 0.5 Mb RAM Exp/switch/clock	85-00
A500 2.0 Mb RAM Exp/switch/clock/0.5 Mb	180-00
A500 2.0 Mb RAM Exp/switch/clock/2.0 Mb	340-00

A2000 8 Mb RAM expansion with 0 Mb	370-00
A2000 8 Mb RAM expansion with 2 Mb	500-00

Epson LX-400 80 Column 9 Pin 180 CPS Printer	300-00
Epson LX-850 80 Column 9 Pin 200 CPS Printer	405-00
Epson LQ-400 80 Column 24 Pin 180 CPS Printer	475-00
Epson LQ-550 80 Column 24 Pin 180 CPS Printer	580-00
Citizen 200GX 9 Pin Color Printer	440-00
Citizen GSX-140 24 Pin Color Printer	680-00

Boot Drive, Memory, ROM, NTSC /PAL etc. mods
All Amiga Repairs

Why buy a slow emulator? For not a lot more you can
have the real thing - with hard drive, floppy and monitor!
AT-286, 1 Mb RAM 40 Mb HD Voice Coil,
200W P/S, Monitor, 101 Key Kbd
1.2 Mb or 1.44Mb Floppy, multi I/O \$1300.00

GVP RANGE

40 Meg GVP A500 Series II +8	980-00
50 Meg GVP A500 Series II +8	1200-00
100 Meg GVP A500 Series II +8	1650-00
50 Meg GVP A2000 Series II HC+8	1150-00
80 Meg GVP A2000 Series II HC+8	1230-00
100 Meg GVP A2000 Series II HC+8	1350-00

RICOH 50Mb Removable Cartridge Hard Dr	1420-00
RICOH 50Mb Cartridge	200-00
SIMM Modules for GVP HC=8 range 2Mb	200-00

22MHz 68030 / 68882 / 1Mb 32bit RAM Series II SCSI controller	1590-00
33MHz 68030 / 68882 / 4Mb 32bit RAM Series II SCSI controller	2475-00
50MHz 68030 / 68882 / 4Mb 32bit RAM	3950-00

1 Mb SIMMS for Accel	240-00
4 Mb SIMMS for Accel	850-00

ticed that some programs that would not load using "normal" JiffyDos load okay with the RAMlink Version.

Accessing different drives with the JiffyDos routines is a breeze and only requires one or two keypresses (no more messy open commands).

Although RAMlink plugs into the cartridge port it does not tie the port up as it has a feedthru slot so you can still use other cartridges with it. CMD make no claims that all cartridges will work in this manner, but I have tried Swiflink, Action Replay V and Final Cartridge 3. The only times I seemed to have problems is when I attempt to use the cartridge fastload routines in conjunction with the RAMlink's JiffyDos routines, which I suppose is understandable.

RAMlink is a very sturdy device (no plastic here), it has two toggle switches (badly placed in my opinion) that enable you to disable/enable RAMlink and to control how external RAM is connected (either normal for RAMlink use or direct for use with programs that support the REU in its usual way). It has three membrane type push buttons for RESET, SWAP 8, SWAP 9. The reset is obvious, the swap buttons are a very powerful feature that enables you to swap the RAMlink with either drive 8 or 9 in the same way as the CMD hard-drives. As I program in my review on the hard drive this is possibly one of the most useful features available as it allows the RAMlink (HD) to be used with almost every type of application.

Even if you don't have an REU then you can still use

RAMlink by purchasing it with its own inbuilt memory (or you can add memory in conjunction with an REU). By adding its own memory it is possible to have up to 16 Megs (yes 16 megs) of RAM on a C64, something unheard of until RAMlink came along. I would assume that the internal RAM would work just as well as with an REU.

I would suggest that if you don't already own an REU, but are thinking of getting one, then seriously consider purchasing RAMlink with internal memory instead, as it would be probably give you more value per \$\$\$, however you won't be able to use the RAM with programs written with the 1750 in mind.

Compatibility

The only compatibility problems that I've had are with some copy protected programs, the RAMlink is as compatible (and functional) as CMD's hard drives. I have found I can use most of my programs without any problem - at the moment the most notable exception is GEOS. RAMlink does not support GEOS without the use of CMD's *Gateway* program (an alternative/improved version of Desktop). At the time I got my RAMlink the *Gateway* program wasn't available, but I understand that it has now been released. I am unsure whether *Gateway* will be supplied with RAMlink as a matter of course, but with my unit I got a registration card entitling me to a copy for the cost of postage, I am currently awaiting its arrival.

RAMlink comes with a single utility disk with programs to customise your preferred settings, make auto boot files etc. The manual is very comprehensive, in fact it is almost a duplicate of the hard drive manual, which is understandable since many of RAMlink's operations are identical to the HD. (This unit could be a "cheap" way for people to actually experience what the CMD HD's are like.)

Summary

In conclusion I would say that this unit is a definite MUST if you have an REU. It would be a worthwhile alternative for those of you contemplating buying an REU. The unit is robust, appears reliable, and truly is a "multi purpose interface" that is packed with features.

Since this unit is a "one of a kind" it is impossible to compare it with other similar devices, but if there was something similar it would be hard to beat RAMlink. Once again congratulations to CMD for delivering yet another great product for the C64.

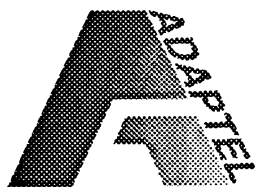
Dedicated C64/128 and GEOS support is available on the THISTLE DOME BBS (OFF-LINE from 9am-9pm Mon-Fri South Australian time) on (08) 322 276. □

Distributed by:

HPD

08 349 8486

RRP \$394 with 1Meg of RAM



Special Prices on Amiga Peripherals

Texas Instruments Laser printers

Canon Bubblejet

**Modems 2400 baud to 9600 baud
from \$220, many specials**

Mega Midget Racers

Conner 2.5" IDE Drives available

SCSI drives a Specialty

e.g. 105MB, 9ms \$777, 170MB \$900, Syquest \$499

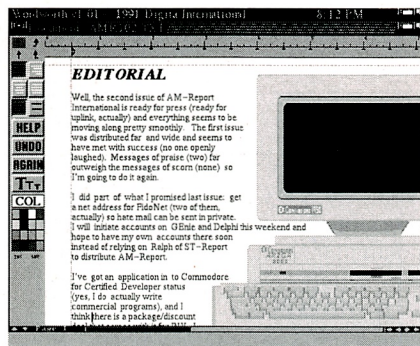
Upgrades for A590, A2000, A3000

Installation available

Call for best prices

Adaptel Pty. Ltd. 145 Kooyong Rd. Caulfield, Vic., 3162

Fax 03-528 4546 Mob. 018 374 540 Ph 03-532 8085



If your words are worth anything, they're worth Wordworth.

Some of the features . . .

- British English Proximity/Collins Linguibase Spell Checker (110,000 Words, 26,000 Merriam-Websters legal & medical supplement)
- British English Proximity/Collins Thesaurus (30,000 headed words, 140,000 cross-references)
- Timed Automatic Document Save, Glossary, Speech
- Import IFF, HAM & Extra Half Brite. Graphics with contoured text flow.
- Colour fonts, full WYSIWYG display. HP Laserjet support.
- Header, footers, margins, indents, subscripts, superscripts and variable line spacing.
- Handles files from WordPerfect, ProText, KindWords, ProWrite or ASCII
- Ultraprint (Quad-Density) Print Output. Mix NLQ printer fonts and Amiga Graphics.

See, Feel, Touch, Hear and Use Wordworth. It's a writer's dream.

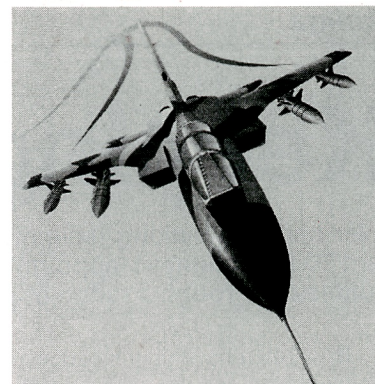
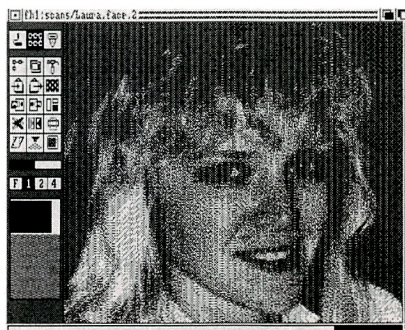


only
\$399

GOLDEN IMAGE SCANNER

Now released through Pactronics, the GOLDEN IMAGE HAND SCANNER with it's brilliant "TOUCH UP" Application software, is here. Once you get one of these, you'll wonder how you got along without one!!

- High resolution upto 400dpi.
- Monochrome clarity.
- Adjustable contrast setting for light and dark images.
- Simple installation - can be ready to scan images in one minute.
- TOUCH-UP software supports a variety of software formats: IFF, IMG, PCX, TIFF, MACPAINT and more.
- Ideal for Desktop Publishing.



ProFlight

ProFlight simulates a Panavia Tornado, the fastest aircraft in the world at ground level (Mach 1.2) and one of the fastest at any level (Mach 2.2 at altitude). It can climb to 30,000ft in less than two minutes from brake release, and, by using advanced wing technology, it can also fly at low speeds. It has one of the most sophisticated weapons systems in the whole world and has a true multi-role capability. ProFlight is one of the most accurate thus most playable, aircraft simulators currently available for home microcomputers. Some of the features are:

- Drag due to gear, air brakes, elevators, tailerons and rudder.
- Correct effect of tailerons, elevators and rudder at all angles of pitch, roll and yaw for extremely accurate flight.
- Full aerobatic capability including stalling, spinning, 90° aileron turns, knife edges and more.
- Auto rudder, auto wing sweep and flaps, plus bank and pitch limiters for use in training.
- Wing lift for sweep and flaps, induced and profile drag for wing seepback and flaps.



Pactronics

PACTRONICS:
N.S.W. Pactronics Pty Ltd, 98 Carnarvon St, Sileverwater. (02) 748 4700
Victoria Pactronics Pty Ltd, 51-55 Johnston Street, Fitzroy (03) 419 4644
Queensland Pactronics Pty Ltd, 12 Stratton St, Newstead (07) 854 1982
South Australia Contact N.S.W. or Victoria Office
Western Australia Pactronics, Unit 3, 257 Bannister Rd, Canning Vale (09) 455 1889

Keeping Track

Ever had that sinking feeling that you have forgotten something important like a business appointment or an anniversary? **George Kimpton** guides us through a range of programs designed to help you keep track.

How often have you experienced that pregnant silence when someone near and dear says "Darling, do you know what today is?" or the boss threatens to use your head for a drum because you forgot about an important client. The sinking feeling in the pit of your stomach at the approaching disaster can be mind-numbing to say the least.

Younger readers out there will probably wonder what I am on about, but your turn will come soon enough. Our whole life revolves around time and remembering. Unfortunately when you become totally absorbed in whatever you are doing, like us computer nuts, it slips by fast and silently. The enjoyment of the moment can often cloud out the memory of what you should remember to do.

Well there is hope for us yet. Our Editor, with a gleam in his eye, suggested that I do a comparison of Diary programs. I'm still wondering whether it was a subtle hint to not be so late with my deadlines for the magazine in future.

Let's see what we can find. To my knowledge there are two commercial programs available, they are *Who! What! When! Where!* and *Day By Day*. A perusal of the Fish Disks also brought to light three PD programs, they are *Nag*, *Badger* and *DTC*.

There will also be a new one from Mike (TUP) Hansel of *KDV* (the virus

killer) fame on the market soon and it looks good so keep a eye open for it. Looking at an early version it would appear to be more versatile and more of a database than *Who! What! When! Where!*

Each approaches the problem in a different way but the basic plan is to flash up a message on the screen and find a way to remind you of important happenings. Some offer flashing lights, others include sound effects or the voice of Amiga. Speaking of *NAG*, one wonders whether the developer had a nagging mother-in-law as he clearly states that unlike your mother-in-law it can be silenced. Well let's look at the commercials first and then compare them to the cheaper Public Domain offerings.

Day By Day

Publisher: Digita

From: Pactivonics 02 748 4700

RRP \$59.95

Day-by-Day comes as a single disk (V1.2) with no special system requirements, although I found the program is best used with a hard disk as is the case with all these diaries.

You are provided with full calendar/diary/planner facilities. Messages can be grouped in categories such as 'Urgent', 'Overdue' or 'Club Meetings' for easy access. You can select to have

advance warning of a single appointment or event. You may also have repetitive reminders of regular events. Day, week and month planner facilities with a pictorial chart summary at a glance. A search facility is also provided for those forgotten anniversaries or appointments. No sign of the demo program mentioned in the manual, which incidentally does cover program operation adequately.

The program opens with a request to confirm date which will be correct with a battery backup clock. Next comes 'Urgent', 'Overdue' then 'This Week' message category screens followed by the Main Menu where it is possible to set up and edit messages. Operation of this screen is by either mouse or hotkey which automatically moves to the appropriate screen.

Here you can choose a number of ways to find, categorise, modify or enter the messages already existing or new messages. You can also select various information options such as appointment duration, times and/or range (Daily/Weekly) to make it easier to assess free time etc.

The planners are good, laying out the day graphically so that everything can be seen at a glance. The monthly planner unfortunately only shows full or half days. Lesser times are blank and, misleadingly, apparently non-existent. Another quirk of the monthly planner is that on a typical calendar display the morning indicator is placed above the date with the afternoon below. It can be confusing at first glance as to which day the morning's appointment applies to.

The message display shows Date, Time, Afternoon or Morning and Mes-

Who! What! When! Where!

Who! What! When! Where!

sage. Provision is made to Update, Add, Delete, Move, Change Categories or Exit.

Quite a useful program - no information on hard disk installation. This program does not automatically remind you of appointments, but must be deliberately accessed by the operator each time. For those in the know it may be possible to modify the startup sequence to automatically bring up the first screen on boot up.

Who! What! When! Where!

Publisher: Blue Ribbon Bakery

From: Dataflow 02 331 6153

RRP \$79.95

A very useful little program that is now residing on my hard disk. It is both a reminder, a diary and a database. In the database it contains names, addresses, phone numbers, grouping data (clubs, interests, etc.) and notes on the person or company. It also has an alarm clock facility that uses selected sounds and/or a voice message to wake you up.

On opening, the first database screen pops up with a brief listing down the side of people, clients, companies etc. A click on a name brings that data screen to the front. From here it is possible to check appointments, set an alarm clock, print out address labels or any other information, dial up the person if you have a modem connected, check the calendar, arrange appointment reminders and frequency etc.

It is also possible to set up reminders for appointments or things to do not related to the database. Provision is made for more than one person to share the database and reminders, with each person "owning" and accessing his or her database. Security is by password if you wish and you can choose to share data or not as you please with other users.

Operation is by mouse. First time installation is simple, click on the Ikon and answer the questions. The appropriate files are installed and the startup sequence is modified to make startup automatic. Nothing could be easier.

Pros and cons: It does automatically provide a visual and sound reminder of appointments or things to do on boot up but once only. However it will not remind you of what you should have done yesterday when you did not boot up. To find this you have to search the calendar or appointment lists.

Clicking on a date on the calendar will bring up the appointments for that day for checking or modification. Old appointments are not lost unless the update command is used to clear them.

The clock alarm can be either a spoken message (internal "Say" program) or one of several included sounds or a digitised sound of your choice. The visual prompt usually displays some pithy comment.

The database screen could be larger allowing more readable data space. Currently as you type beyond around 30 characters in a field the text scrolls off screen, making it difficult to read the

Continued on p32

ATonce V1.27

The Ultimate IBM-AT-Emulator
for the Amiga 500

AT a price you can afford

\$549

80286 processor + Multitasking

704K + 8M Extended/Expanded memory

Boot from any hard drive

Support all Amiga hardware

Copy from DOS to DOS with supplied utility

VGA-EGA-CGA Graphics

Dealers required

105M Quantum hard drive

\$895

Fit this into your A590 and fly

Fonhof Computer Supplies

64 Cross Street, Baulkham Hills NSW 2153

Phone (02) 639 7718 Fax (02) 639 5995

**AMIGA
AMIGA
AMIGA**

ICD Inc.

&

**Golden Image
Products**

Customer Service

1162 Hay St. West Perth, WA 6005

TEL (09) 4810555 FAX (09) 4281444

01 JULY 1991

Australian Distributor for

POWER COMPUTING (UK)

ATARI

External FDD (Joystick Powered)	\$161
External FDD with Power Supply	\$181
Internal Floppy Disk Drive	\$134
Supercharger IBM Emulator	\$719
Atari 3.5" Multi Drive	\$530
Blitz Turbo Copier	\$54
ICD AdSpeed	\$338
Golden Image Optical Mouse	\$98
Golden Image HandScanner	\$178
Golden Image Mechanical Mouse	\$55
Golden Image Trackball	\$98
Power Computing Mouse 290DPI	\$64
External 5.25" Floppy Disk Drive	\$234
SCSI Adapters for Hard Drives	\$132
AT Once IBM Emulator	\$552
NEW Controversial Ultimate Ripper Cartridge	\$110
Cleanup ST	\$52
NEW 2Mb Memory Upgrade	\$306
4Mb Memory Upgrade	\$500
Multisync Monitor Cable/Audio Out	\$82
LC10 Fabric Print Kit	\$54
20Mb Slimline Hard Drive	\$829
40Mb Slimline Hard Drive	\$874
52Mb Slimline Hard Drive	\$943
105Mb Slimline Hard Drive	\$1,159

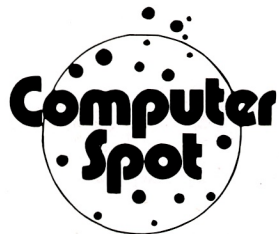
Note: The 20Mb and 40Mb Slimline Hard Drive can be powered from the Atari ST saving approx \$100.00 on the above prices

AMIGA

AT Once IBM Emulator	\$552
Amiga Anti Click Power Drive	\$181
Amiga Dual Floppy Drive	\$293
Golden Image Optical Mouse	\$98
Golden Image Mechanical Mouse	\$55
Golden Image Hand Scanner	\$478
Golden Image Trackball	\$98
Power Mouse	\$64
Blitz Amiga Copier	\$71
Amiga 500 Internal FDD	\$131
Amiga Anti-Click Board	\$47
Amiga Midi Interface	\$54
Flicker Free Video	\$555
NEW A500 Internal 20Mb Hard Disk	\$890
A500 Internal 40Mb Hard Disk	\$1,188
A500 Internal 60Mb Hard Disk	\$1,603
Prima 52Mb Internal	\$864
Prima 105Mb Internal	\$1,210
Shuffle Board	\$55
ICD AdSpeed Amiga	\$393
Amiga Slimline 45Mb Hard Disk	\$853
Amiga Slimline 52Mb Hard Disk	\$980
Amiga Slimline 60Mb Hard Disk	\$1,168
Amiga Slimline 105Mb Hard Disk	\$1,213
Amiga Slimline 120Mb Hard Disk	\$1,393
AdRam 505 (0-512k) Ok	\$51
NEW AdRam 540 (0-4Mb) Ok	\$186
AdRam 560D (2Mb) add to 540	\$326
AdRam 2080 (0-8Mb) Ok	\$214
AdSCSI 2000	\$216
AdSCSI 2080 (0-8Mb) Ok	\$323

Orders Only: 008 099185

PAYMENT TERMS: CHEQUE: Please make cheques payable to ACL Engineering and send them to the address above. Please allow 7 days delivery on mail orders. CREDIT CARD: We accept Bankcard & Visa Credit Cards. To place your order please Telephone (09) 481 0555 or 008 099185. Where possible subject to stock being available, all items ordered will be delivered overnight at the appropriate freight charges. Above prices do not include Freight and installation & prices are subject to change without notification.



Bondi Junction (02) 369 4355 • Brisbane (07) 229 8011
 Burwood (02) 744 8809 • Chatswood (02) 419 2333
 City (02) 261 4344 • Hurstville (02) 570 7333
 Liverpool (02) 601 7700 • Newcastle (049) 42 1522
 Parramatta (02) 891 1170 • Penrith (047) 32 3377

Computer Spot
MAIL ORDER
TOLL FREE (008) 252 130
FOR ORDERS ONLY
PHONE (02) 638 2897

UNBEATABLE!!!

AMIGA 500 Starter Kit



Contents:

- Amiga 500
- RF Modulator
- Joystick
- Kindwords
- Fusion Paint
- Indiana Jones
- Kick Off
- F-18 Interceptor

(Monitor not included)

SAVE \$200 off RRP

\$799

HOT

Bonus 8 FREE Games

AMIGA 2000 HD

Includes 40 Mb Hard Disk



(Monitor not included)

\$1995

50 only Below dealer cost Hurry!

Save \$400

ROCTEC'S AMIGA 500

2 Mb RAM Card

\$399

NEW ROCKNIGHT
Hardware Virus Checker

\$99

NEW

CITIZEN

GSX 140

24pin Colour Printer

\$699

SAVE \$100

2 Year Warranty

2 Year Warranty

GVP

Amiga 500 42 Mb HD

\$999-00

Amiga 500 105 Mb HD

\$1699-00

Amiga 2000 52 Mb Hardcard

\$899-00

Amiga 2000 105 Mb Hardcard

\$1399-00

Amiga 2000 68030+1Mb

\$1799-00

Commodore 64

- | | |
|-----------------------|-------|
| • 1541 Mk II Drives | \$299 |
| • MPS 1230 Printer | \$299 |
| • 1802 Colour Monitor | \$269 |

AMIGA 2000

- | | |
|--------------------|--------|
| • AT Bridgeboards | \$869 |
| • 2 Mb (8 max) RAM | \$499 |
| • 68030 Card | \$1399 |

includes 2Mb, 25Mhz, 68030 chip

1084S Monitor \$399

AMIGA

"No Fuss" Software Exchange Policy
If it doesn't work when you get home,
we'll replace it - for the same title!



AMIGA SOFTWARE & HARDWARE

ART & UTILITIES

ART DEPARTMENT PRO	Excellent graphics manipulation	299.99
BROADCAST TITLER 2	Titling software. 2 MEG req'd	399.00
DELUXE PAINT 3	If you own an Amiga, own this	99.95
DELUXE PRINT 2	Make signs, banners and cards	99.95
DELUXE VIDEO III	Make your own movies	99.95
DESIGN 3D	3D modeling program	159.95
DIGIVIEW GOLD 4	Digitize Photos	299.00
DISTANT SUNS	Awesome astronomy program	99.95
SCULPT ANIMATE 4D	Powerful rendering/Animation	799.00
VISTA	Create fractal landscapes	149.95
AMIGA VISION	Icon based software authoring system	149.00
AMOS	Games / demos creator language	129.95
AREXX	Programming language	84.95
B.A.D.	NEW VERSION 4.0	89.95
CROSS DOS	Access mscdos files on amiga drives	59.95
DEVPAK	Programmers assembly language	189.95
DISK MASTER	High quality file utility	69.95
GOLD DISKS ALL IN ONE	Write, paint and compose	99.95
GPTERM	Comm's with vteal	99.95
HYPERBOOK	New authoring program	139.95
KDV-5	Control the virus!	24.95
LATTICE C COMPILER 5.1	The #1 'c' compiler	499.00
PRO VIDEO POST	Video titling with anti aliased fonts	399.00
MAVERICK	Disk based game copier Parameters	79.95
MEGA DOS	Amiga dos tutorial	19.95
MEGADISK	Vol. 2 thru to 20 available	19.95
QUARTERBACK 4.0	Hard drive back up tool	99.95

ARCADE & ADVENTURE

ALIEN DRUG LORDS	sci-fi adventure	59.95
B.A.T.	Sci-Fi adventure	69.95
BACK TO THE FUTURE 2	Arche game of the movie	59.95
BRAT	new arcade action	69.95
BUCK ROGERS	Classic sci-fi hero fun	49.95
BATTLE COMMAND	3-D tank simulator	69.95
CINEMAWARE BUNDLE	Defender crown / King Chicago SDI	39.95
CURSE AZURE BONDS	D&D epic adventure series	49.95
CAPTIVE	SC-Fi role playing game	59.95
CELUCA GT4	Excellent new rally cross game	69.95
CHASE HQ 2	High speed racing fun	69.95
CHAMPIONS OF KRYNN	Role playing epic	59.95
CODENAME ICEMAN	Sierra secret agent adventure classic	59.95
CONQUEST OF CAMELOT	A highly recommended sierra adventure	59.95
DOUBLE DRAGON 2	Golden Classic	49.95
DUNGEON MASTER	3D excellent role playing	69.95
MASTER DATA DISK 1	Chaos strikes back, requires above	59.95
EYE OF THE BEHOLDER	Latest D & D adventure	59.95
ELVIRA	Hot adventure game fun with	79.95
GHOSTS & GOBLINS	The arcade classic is fantastic!	49.95
GODS	Excellent arcade adventure	69.95
GOLDEN AXE	Arche smash hit	59.95
GREMLINS 2	Hit game based on the movie	59.95
IMMORTAL	3D Arcade adventure	59.95
KINGS QUEST 4	The classic comes to the amiga	59.95
KILLING CLOUD	Strategy adventure	69.95
LEMMINGS	You'd be crazy to miss this!	69.95
LOTUS TURBO ESPRIT	2 player dual screen racing fun	69.95
LOOM	Adventure game epic	59.95
LEGEND OF FAERCHAIL	3D role playing epic	59.95
LEISURE SUIT LARRY 3	Sierra hit adult adventure	59.95
MEGATRAVELLER	Sci-Fi role playing	79.95
MEAN STREETS	Sci-Fi detective adventure	69.95
MIG-29	Soviet flight simulator	69.95
MIGHT & MAGIC 2	Known as the best role playing epic	59.95
NOBUNGAS AMBITION	VERY HEAVY QUALITY ADVENTURE	79.95
NARCO POLICE	Great new arcade game	59.95
NARC	Great arcade conversion	59.95
NINJA WARRIORS	Superb quality arcade hit	54.95
ORBITUS	New graphic adventure from psychosis	69.95
PANZA KICK BOXING	New release	59.95
POOL OF RADIANCE	D & D role playing game	49.95
POLICE QUEST 2	More crime bustin' adventures!	59.95
PREDATOR 2	Arche film tie-in	69.95
QUEST FOR GLORY 2	Heroes Quest 2	69.95
RANX	Crazy new futuristic game	59.95
ROBOCOP 2	Arche smash em up go robo	69.95
SECRET OF MONKEY ISLAND	New adventure from Lucasfilm	69.95
SHADOW OF BEAST 2	Show off your amiga today!	79.95
SHADOW DANCER	Shinobi-style martial arts	69.95
SKULL & CROSSBONES	Swashbuckling adventure	49.95
SUPER MONACO GP	Arche racing action	59.95
SWIV	Silkworm 2, excellent shoot-em-up	69.95
SEARCH FOR THE KING	Larry style adventure	69.95
STUN RUNNER 3D	fast paced action	69.95
STREET ROD	Buy it, build it up, race it!	49.95
SPIRIT OF EXCALIBUR	Adventure with excellent graphics	69.95
SPACE QUEST 3	Outer space sierra	59.95
SPEED BALL 2	Futuristic sports	59.95
Teenage Mutant Ninja Turtles	Ask your kids!	69.95
TURRICAN 2	Great arcade shoot up!	69.95
TOTAL RECALL	Arche movie tie-in	69.95
ULTIMATE RIDE	New Release	59.95
U N SQUADRON	Arche hit	59.95

SIMULATORS & STRATEGY

VIZ	Zany comic action, Not for kids	59.95
WHEELS OF FIRE	Excellent car completion pack	49.95
WRATH OF THE DEMON	High quality adventure game	89.95
A-10 TANK KILLER	3D war strategy action	69.95
Advanced Destroyer Simulator	Naval strategy	69.95
ACTION STATIONS	WWII naval strategy	59.95
BLUE MAX	W.W.1. flight simulator	69.95
BATTLE OF BRITAIN	Their finest hour!	59.95
BANDIT KING OF ANCIENT CHINA	Deep and involved strategy	89.95
BATTLE CHESS	Famous animated chess game	49.95
CHESSMASTER 2000	Best quality 3d chess ever	49.95
CONFLICT: MIDDLE EAST	Arab/Israeli wars	59.95
DAS BOOT	W.W.1. submarine simulation	69.95
F-15 STRIKE EAGLE 2	New from Microprose!	89.95
F29 RETALIATOR	3D combat simulator	59.95
F-15 STRIKE EAGLE 2	NEW from Microprose	89.95
FIGHTER BOMBER	Voiced best game! combat simulator	49.95
F19 STEALTH FIGHTER	Absolutely amazing!	79.95
GENGHIS KHAN	Ancient orient strategy	99.95
HARPOON	Submarine simulation wartime	59.95
HARPOON BATTLESET 2	North Atlantic convoy	49.95
HARPOON BATTLESET 3	The Med conflict	49.95
HOYLES GAMES 2	More great card games	69.95
IMPERIUM	Very heavy sci-fi galactic power	49.95
INDIANAPOLIS 500	3D Car racing GAME OF THE YEAR 90'	49.95
M1 TANK PLATOON	Quality 3D tank simulation	89.95
NAM	Strategy in Vietnam	89.95
POWER MONGER	Awesome 3D global control game	59.95
RAILROAD TYCOON	Control your own railway co.	89.95
SECOND FRONT	War game	59.95
SUPREMACY	SC-Fi EPIC Role Playing	69.95
TEAM SUZUKI	3D motorcycle racing action	59.95
TEAM YANKEE	Excellent 3D tank simulation	84.95
ULTIMA 5	Heavy d&d strategy	79.95
UMS 2	Follow-up to strategy great	89.95
WOLFPACK	Submarine simulation	79.95
WHITE DEATH	Strategy on the russian front	59.95
WAR GAME CONST SET	Make your own strategies	49.95
WARLORDS	Medieval strategy	49.95

SPORTS

AMIGA CRICKET	Excellent game needs 1 meg	49.95
Jack Nicolas Course Design	Fantastic 3d golf and course maker	79.95
KICK OFF 2	Still the best soccer game	59.95
PRO TENNIS 2	Best tennis game seen	59.95
PANZA KICK BOXING	Excellent martial arts	59.95
PGA TOUR GOLF	Latest and greatest golf	59.95
TV SPORTS FOOTBALL	Enjoy gridiron ?? get this	69.95
TV SPORTS BASKETBALL	Best sports hit game	69.95
TOURNAMENT GOLF	Arche style golf game	59.95
WINNERS ITALY 1990	Soccer fans go for it!	49.95
WORLD CUP SHIP SQUASH	Play club rounds or full championship	59.95
WORLD CUP 90 SOCCER	More soccer fun	49.95

BUSINESS & HOME

ADVANTAGE	Powerful high speed spreadsheet	299.00
DG CALC	Quality spreadsheet	99.95
DESKTOP BUDGET	Home finance controller	99.95
EASY LEDGERS	Accounts payable & receivable	399.00
ELECTRIC THESAURUS	On-Line multi-tasking excellent	69.95
EXCELLENCE 2.0	Professional wordprocessor	299.00
GOLD DISK OFFICE	Complete Dbase Sp sheet Wpro graphics	399.00
HOME ACCOUNTS	Balance visabankcard and the gas bill	69.95
KIND WORDS	Word processing package + dictionary	49.95
MAILSHOT PLUS	Mailing label processing package	69.95
MAXIPLAN PLUS	Top spreadsheet	199.00
PAGE STREAM 2.1	Quality desktop publishing	399.00
PAGE STREAM FONTS	Additional fonts	59.95
PROPER GRAMMAR	Check your Grammar	149.00
PAGESSETTER II	Beginners dtp package	179.95
Professional PAGE 2.0	Quality dtp package	399.00
PROWRITE 3.0	Wordpro with colour & graphics	219.00
SCRIBBLE PLATINUM	High speed quality word processor	129.95
SUPERBASE PERSONEL 2	Excellent Dbase package	139.95
SUPERBASE Professional	Fully programmable database	299.00
SYSTEM 3	Excellent business pack, call	129.95
TRANSWRITE	Quality word processing system.	99.95
WORKS PLATINUM	Improved word pro spread sheet database	229.95

EDUCATIONAL

Beginning German	Sprechen sie deutsch	89.95
DUCK TALES	Great fun for the kids	59.95
Deernal Dungeon	Educational junior high 5th	69.95
FUNTSCHOOL 8-up	Educational collection	49.95
FUNTSCHOOL 2-5 (3)	Educational collection	49.95
FUNTSCHOOL 5-7 (3)	Educational collection	49.95
KID TALK	Quality sentence learning	49.95
Intellotype	Learn to touch type on computer	49.95
LOGO AMIGA	Educational programming skills	139.95
MATH Blaster Plus	Great learning fun for all	69.95
Math Talk	Quality maths learning 5 to 10yr	49.95
Mavis Beacon Teaches Typing	#1 Typing tutor all ages	69.95

MICRO FRENCH 1 & 2	Learn French	54.95
PRIMARY MATHS	Education Series	54.95
READ & RHYME	Educational 5 to 10 yr olds	69.95
READ A RAMA	Reading program	69.95
SIM CITY	Design and maintain model city	89.95
Speller Bee	Learning words	49.95
Where in Europe Carmen	Geography adventure	84.95
Where in USA Carmen	Geography educational game	84.95
Where in World Carmen	Geography educational game	84.95
Where in Time Carmen	Latest release in the series	84.95

MUSIC

BARS & PIPES	midi sequencer	349.00
BARS & PIPES PRO	Professional midi sequencer	549.00
DELUXE MUSIC CONST. SET	Composition editor	99.95
MUSIC X	Quality midi & editing tool	299.00
SONIX	Music editor	149.95
HARMONI 24	track MIDI sequencer	149.95

HARDWARE

40 MEG SCSI H Drive Quantum	Voice-coil, auto-park, 11-18ms	749.00
8UP Memory Board 2MB RAM	A2000 ram exp board	699.00
A2010 Internal Drive	A2000 internal drive	199.00
Accelerator GVP A3001 4MB	68030 4Mb 32bit ram 8200-pro 28mhz	2695.00
ACCELERATOR A2630	68030 68882 2MEG RAM 25MHZ	1399
AMIGA 500 STARTER PACK	Inc tv modulator & software	889.00
AMIGA 2000	Latest model, we love it!	1399.00
AMIGA 2000 PRO	With extra \$1000 in software	1799.00
AMIGA 2000HD (40MBHD)	40 Meg drive factory fitted!	1995.00
AMIGA 2000HD PRO	With 40 Meg drive and software	2495.00
AMIGA 3000 25MHZ	The stuff that dreams are made of	5495.00
AMIGA A590 20MB HARD DRIVE	Suits amiga 500 2meg ram options	699.00
ACTION REPLAY MK2	New version for A500 and A2000!	249.00
ADRAM 540 OK INSTALLED	Expandable to 4 meg for the A500	269.00
COMIDI AMIGA	Quality amiga midi	179.95
COMIDI Pocket Midi	Budget midi interface	109.95
AMIGA 500	Powerful home computer	799.00
Deluxe Kit Amiga 500	1 Meg a500 + heaps of software	1099.00
Flicker Fixer A2320	No more interface!	449.00
Golden Image Optical Mouse	Extremely reliable Amiga mouse	139.95
KCS Power Board A500	Item emulator for your a500 amiga	799.00
MONITOR CBM 1084S	Monitor, suits amiga atan c54 & PC	449.00
PC Emulator Bridge Board AT	Inc. 5.25" 1.2 meg drive	799.00
PHILIPS MONITOR (CM8833)	Stereo, 2 yrs warranty!	489.00
STAR NX 1000C	Colour 9 pin. Feature packed.	399.00
CITIZEN GX 200	Colour 9 pin. Outstanding performance	499.00
CITIZEN 140 GX	Colour 24 pin. Feature packed	799.00
EPSON LQ 400	Black 24 pin. Superb print	599.00
BROTHER M1324	24 Pin, 7 Fonts	499.00
CBM MPS 1230	Budget 9 pin.	299.00
RAM CHIPS A590/ADRAM	PER MIG	149.95
ROTEC GENLOCK	Unbelievable value IT'S HOT	299.00
Rotech Mouse	The best amiga mouse!!!	39.95
RF302C Disk Drive	Slim external drive on/off switch	149.00
TRUMPCARD PRO A2000	Top speed performance scsi interface	499.00
Scanner Golden Image	400 DPI suits all Amigas	399.00
Digiview PAL V4.0	Best quality still digitizer	299.00
VIDI AMIGA	Frame grabber pal now with vidichrome	499.00
MODEM AVTEK 124	Auto everything quality high speed	399.00

Guarantee

Computer Spot

will beat any GVP

price advertised in

this magazine.

BEAT THAT!!



There's a Spot near you!

SEGA

PC SOFTWARE & HARDWARE • C64 SOFTWARE & HARDWARE

PC SOFTWARE & HARDWARE

ART, GRAPHICS, UTILITIES, BUSINESS & HOME

3D CONSTRUCTION KIT	build your own world	129.95
BANNERMANIA	Signs, banners etc...	69.95
DELUXE PAINT ANIMATION	Animation for your pc!	99.95
DELUXE PAINT 2 ENHANCED	Best graphic editor/ colour printing	99.95
DATA MANAGER	Simple quality database	59.95
DG CALC	Pc spreadsheet	89.95
EXPRESS PUBLISHER	Professional publishing	299.95
MAILSHOT PLUS	Mailing database system	109.95
MENU MAKER	Excellent menu designer package	49.95
NEWSROOM	Home desk top publishing	49.95
PUBLISH IT 1.2	Quality desk top publishing	349.95
PUBLISH IT LITE	Budget dip package	99.95
PRINT SHOP	Print cards banners signs..	99.95
SUPERCOMM	Quality communications package	119.95
SWIFTCALC	Quality spreadsheet	59.95
SYSTEM 3	Quality business pack, call	129.95
WORD WRITER	Quality word processor	79.95

ARCADE & ADVENTURE

ALTERED BEAST	Classic arcade game	59.95
BACK TO THE FUTURE 2	Arcade game of the movie	69.95
BATTLE TECH 2	Crescent hawks revenge	69.95
BANDIT KINGS	Role playing adventure	99.95
BUCK ROGERS	Fantastic adventure fun	69.95
CRACKDOWN	Arcade action thriller	59.95
CHAMPIONS OF KRYNN	Role playing hit	54.95
CODENAME ICEMAN	Sierra secret agent adventure	69.95
CONQUEST OF CAMELOT	Sierra medieval quest	69.95
COUNT DOWN	VGA adventure spectacular	69.95
DOUBLE DRAGON 2	Hot arcade smash em up!	59.95
EL VIRA	Adventure game horror fun	89.95
GENGHIS KHAN	Excellent oriental strategy game	89.95
HEART OF CHINA	Indiana Jones style in VGA	79.95
INDIANAPOLIS 500	Best 3d car racing seen!	59.95
KINGS QUEST 5	Epic sierra adventure in VGA	99.95
LARRY TRIPLE PACK	Leisure suit larry 1,2 and 3	89.95
MECH WARRIOR	It's back! Sc-Fi role playing epic	69.95
MEGATRAVELLER	The no.1 sc-fi role playing hit!	109.95
MARIO ANDRETTI'S RACING	Better than Indy 500!	69.95
MONTY PYTHON	Classic madcap arcade madness	69.95
Microprose Compilation	Gunship / Silentservice / Airbourne	59.95
MIGHT & MAGIC 2	Voted no. 1 adventure role playing	54.95
NIGHT BREED	Excellent horror adventure	69.95
NASCAR CHALLENGE	US NASCAR racing	69.95
NOBUNAGS AMBITION	Deep asian historic adventure epic	89.95
NOBUNAGS AMBITION2	Great sequel strategy	99.95
PUNISHER	Hot new release	89.95
QUEST FOR GLORY 2	Sierra Hit new adventure	79.95
RISE OF THE DRAGON	VGA 256 culd adventure game	79.95
RANX	Futuristic adventure	59.95
STREET ROD	Buy it, build it up, n' race it!	54.95
Secret Silver Blades	More d&d role playing	54.95
Search For The King	Elvis mystery adventure	69.95
Sierra Starter Pack	Space Quest / Larry / Police Quest	79.95
Space Quest 5	Roger Wilco is back in VGA	79.95
Star Control	Deep SC-Fi adventure strategy game	69.95
SUPER OFF ROAD	Hot new car racing fun	59.95
Teenage Mutant Ninja Turtles	Suck on the pizza dudes!	69.95
TURBO OUTRUN	Arcade racing fun	69.95
TEST DRIVE 3	VGA 256 colour car driving game	89.95
ULTIMA 6	Epic role playing hit	69.95
WING COMMANDER	256 colour space simulator	89.95

SPORTS

3D POOL	3 dimensional pool game	69.95
HARDBALL 2	Great baseball hit game	59.95
ITALY 1990	Soccer mania	59.95
INTERNATIONAL SOCCER	Wow more soccer madness excellent!	69.95
Jack Nicklaus Golf Designer	Golf simulator fantastic	69.95
LINKS GOLF	VGA 256 the best golf	69.95
LINKS COURSE DISKS	Both 1 and 2 available	39.95
LAKERS VS CELTICS	Basketball at the top!	54.95
PGA TOUR GOLF	Fantastic golf fun!	59.95
PANZA KICK BOXING	Excellent martial arts game	59.95
TV SPORTS BASKETBALL	Best selling sports hit!	79.95
TV SPORTS FOOTBALL	Best selling sports hit!	59.95

STRATEGY & SIMULATIONS

A10 TANK KILLER	Tank attack aircraft simulator	69.95
BATTLE CHESS 2	Oriental chess 3d animated	69.95
BLUE MAX	WW2 Bi-plane heros	69.95
COVERT ACTION	War strategy	79.95
CURSE OF AZURE BONDS	Role playing adventure	54.95
Chuck Yeagers Cmbt Simlr	Excellent new release!	69.95
DAS BOOT	World war 2 submarine simulation	69.95
DEATH KNIGHTS OF KRYNN	Yet another D&D adventure	59.95
EYE OF THE BEHOLDER	Great D&D action, adventure	59.95
F15 STRIKE EAGLE 2	Air combat mission simulator	69.95
F19 STEALTH FIGHTER	Complex fighter plane simulator	109.95
FIGHTER BOMBER	Voted #1 combat simulator	59.95
FLIGHT OF INTRUDER	Top quality fighter plane simulator	69.95

HOYLES GAMES 2	More excellent card games	69.95
JET FIGHTER 2	All New vga flight simulator	89.95
M1 TANK PLATOON	War simulator	89.95
MIG-29	Soviet flight simulator	79.95
NOBUNAGS AMBITION	Deep strategy game ancient Japan	89.95
PANZER BATTLES	War game from SSI	49.95
RED BARON	WWI flying simulation	79.95
RAILROAD TYCOON	The ultimate business simulation	89.95
SIM EARTH	Create your own planet	109.95
SILENT SERVICE II	Submarine simulator	79.95
SECOND FRONT	War time russian strategy	69.95
TEAM YANKEE	3D high quality combat game	89.95
TEST DRIVE 3	Excellent on VGA	69.95
THEIR FINEST HOUR	Brilliant 3d air combat game	69.95

EDUCATIONAL

DUCK TALES	Educational	59.95
FIRST WRITER	Early word processing skills	29.95
FUNTSCHOOL 2-6	Educational fun	49.95
FUNTSCHOOL 6-8	Educational fun	49.95
FUNTSCHOOL 8-UP	Educational fun	49.95
MATH BLASTER PLUS	Learning skills	49.95
Mavis Beacon Teaches Typing	Quality maths package	69.95
MICKEY ABC	Typing tutor	69.95
MICKEY SHAPES	Early educational	69.95
MICKEY MATHS	Early educational	69.95
PLAYROOM	Early educational	69.95
SIM CITY	Early learning fun & games	79.95
SPELL IT PLUS	Design & control a city	89.95
WHEEL OF FORTUNE 2	Quality education package	69.95
Where In Europe Is Carmen	Great family home game	39.95
WHERE IN TIME CARMEN	Geography game	84.95
WHERE IN USA CARMEN	Teaches history & geography	84.95
WHERE IN WORLD CARMEN	Geography game	84.95
WORLD ATLAS	Geography game	84.95
	Atlas on computer, fantastic!	89.95

HARDWARE

AGILEN MOUSE	Excellent value mouse	79.95
ADLIB SOUND CARD	The original sound card	239.00
COMMODORE PC286-16	NEW! 286/16MHZ VGA	1995.00
CGA MONITOR	4 colour PC monitor	449.00
EGA MONITOR	16 colour HI-RES PC monitor + card	699.00
VGA MONITOR	256 colour HI-RES PC monitor + card	999.00
IBM GAME CARD	Required for Joystick	39.95
Joystick Analog Plus	Quality joystick	59.95
Joystick Analog Extra	Superb PC joystick	69.95
Star Cursor Joystick	The best joystick comes to PC	79.95
Sound Blaster Card	Magnificent PC sound add-on!	299.00
Lightscan 200J Scanner	Handheld scanner 200DPI	199.00
Lightscan 400H Scanner	Handheld 400DPI with OCR	369.00
Genius PC Mouse GM-6X	Microsoft compatible 3 button	79.95
Genius PC Mouse GM-F302	As above inc Graphic Art software	139.00
Genius PC Mouse GM-F303	As above inc CAD software	159.00
OPTIMA 286's	Made to measure, ring with specs	CALL
OPTIMA 386's	Made to measure, ring with specs	CALL
PRINTERS :-		

SEE PRINTERS UNDER AMIGA HARDWARE all compatible to PC!

C64 SOFTWARE & HARDWARE

ART & UTILITIES

ACTION REPLAY MK6	Hacker utility cartridge	134.95
AWARD WARE	Create & print own awards	29.95
DATA MANAGER	Quality database package	39.95
EXPERT CARTRIDGE	Utility cartridge	149.95
FAST LOAD CARTRIDGE	Limited stocks	49.95
KWIK WRITE	Budget word processor	29.95
MINI OFFICE 2	Wordpro/dbase/spreadsheet/comms	44.95
NEWSROOM	Desk top publishing package	39.95
PRINT SHOP	Print signs, cards, banners	79.95
PAPERCLIP PUBLISHER	Desktop publishing	54.95
SWIFTCALC	Fully featured spreadsheet	39.95
TOP 20 SOFTWARE TOOLS	Great collection of classic utilities	39.95
TURBOLOAD FASTLOAD	Fastloader cartridge with reset	49.95
WORD WRITER 5	Promising word processor	69.95

ARCADE & ADVENTURE

ATOMIC ROBOKID	Arcade smash hit	39.95
BACK TO FUTURE 2	Great game of the movie	39.95
BUCK ROGERS	Comic book classic adventure	39.95
CASTLEVANIA	Arcade adventure	39.95
CHAMPIONS OF KRYNN	Role playing hit	49.95
DEATH KNIGHTS OF KRYNN	Latest D&D adventure	49.95
DAYS OF THUNDER	Tom Cruise car action	49.95
DOUBLE DRAGON 2	Arcade smash hit	39.95
DRAGON NINJA	Kung fu action game	39.95
E SWAT	Arcade action hit game	39.95
GHOULS & GHOSTS	Quality arcade conversion	39.95
GOLDEN AXE	Arcade smash hit	39.95
KINGS BOUNTY	Adventure quest	39.95
LOTUS TURBO CHALLENGE	Two player arcade racing	39.95
MONTY PYTHON	Arcade madness	39.95
MIGHT & MAGIC 2	Excellent role playing game	44.95
NINJA REMIX	New release of Last ninja	39.95
ROBOCOP 2	Hit movie based arcade game	49.95
SUPER MONACO GP	Arcade racing	39.95
SHADOW WARRIOR	Kung fu hit arcade	39.95

SHADOW DANCER	Shinobi-style action	39.95
STREET ROD	Buy it, build it up, n' race it!	44.95
SECRET SILVER BLADES	Great new role playing hit!	39.95
STRIDER 2	Arcade smash hit	59.95
SUPER OFF ROAD RACING	3D over head racing	39.95
Teenage Mutant Ninja Turtles	Finally it's here!!!!	39.95
TOTAL RECALL	Movie hit game	49.95
ULTIMA 6	NEWClassic role playing	84.95
VIZ	Not for Kids	39.95
WHEELS OF FIRE	Top collection of racing car hits!	39.95
Wonder Boy In Monster Land	Arcade smash hit	39.95

SPORTS

ALL STAR TEST CRICKET	New cricket game	39.95
BLADES OF STEEL	Ice hockey action	39.95
CRICKET CAPTAIN	Manage a cricket team	29.95
JACK NICKLAUS GOLF	Great golf game	39.95
JORDAN V BIRD	One on one basketball	29.95
ITALY 1990	Soccer mania	39.95
TV SPORTS FOOTBALL	3D sports game	49.95
WINNERS ITALY 1990	Soccer at it's best	39.95
WORLD CUP 90 SOCCER	Excellent sports fun	39.95
ULTIMATE GOLF	New golf release	49.95

STRATEGY & SIMULATION

BATTLE CHESS	3D animated chess fun	39.95
CHESSMASTER 2100	Latest chess game	49.95
DESTROYER ESCORT	Naval action simulator	39.95
FERRARI FORMULA 1	Quality racing game	39.95
F16 COMBAT PILOT	Combat flight simulator	49.95
F18 HORNET	Nice Air combat game	49.95
FIGHTER BOMBER	Voted best game, combat simulator	39.95
PANZER BATTLES	Strategic tank battles	39.95
PROJECT STEALTH FIGHTER	Air-combat simulator	49.95
RED STORM RISING	Submarine combat simulator	49.95
REACH FOR STARS	Classic space strategy	39.95
STAR CONTROL	Galactic conquest	39.95
STORM ACROSS EUROPE	Strategic warfare	34.95
SUBBUTEO	Table soccer simulator	39.95
U N SQUADRON	War simulation	39.95
ULTIMA 5	Ultimate role playing game	59.95
VEGAS GAMBLER	Gambling hits	44.95

EDUCATION

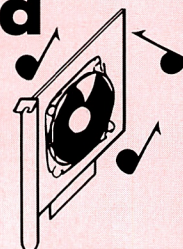
FAMILY FEUD	Family word game	29.95
FUNTSCHOOL	2-6Early learning skills	24.95
FUNTSCHOOL	6-8Educational fun	24.95
FUNTSCHOOL	8-UPLearning is fun at home!	24.95
MATH BLASTER	Early learning game	59.95
Mavis Beacon Teaches Typing	Best typing tutor	49.95
SIM CITY	Build, govern, your own city!	59.95
SPELL IT	Early learning skills	59.95
TYPE	Quality typing tutor	39.95
Wheel Of Fortune	Family word game	29.95
Where In Europe Is Carmen	Geography game	69.95
Where In USA Is Carmen	Geography game	69.95
Where In World Carmen	Geography game	69.95

HARDWARE

1541 DISK DRIVE	For the commodore 64	299.00
Action Replay MK6	Hacker utility cartridge	134.95
C64 TEST Pilot Pack	C64 computer, disk drive, games	499.00
CABLE RF C64	Connect C64 to TV	14.95
CABLE SERIAL 1.5M C64	Suits disk drives/ printers etc	9.95
Dataseite	Budget storage for C64	49.95
Disk Notcher	Double disk storage	14.95
Power Supply C64	Replacement power supply	54.95
Printer MFS1230	9 Pin, suit C64 serial + PC	299.00
Ketec JNR Printer Interface	Allows use of parallel printer on C64	129.00

PC SOUND BLASTER Card

\$279



MAIL ORDER

TOLL FREE (008) 252 130

FOR ORDERS ONLY

PHONE (02) 638 2897

After something special?
If it's not here, we can chase it for you.



GAMEBOY • SEGA MEGADRIVE

NINTENDO GAMEBOY

HARDWARE

GAMEBOY	Take your games anywhere	149.00
ILLUMINATOR	Play in the dark	49.95
PROTECTOR	Case, holds gameboy + 7 games	39.95
AUTO POWER	Plug into car cigarette lighter	29.95
AC ADAPTOR	No more batteries	29.95

SOFTWARE

BASES LOADED	Baseball action	59.95
BOXXLE	Arcade puzzle	59.95
BUBBLE GHOST	Blow bubbles past hazards	59.95
BURAI FIGHTER	Space harrier type action	59.95
CATRAP	Challenging arcade fun	49.95
CASTLEVANIA	Arcade adventure	49.95
CHESSMASTER	Can you beat this?	69.95
CHASE HQ	Arcade car chase	69.95
DOUBLE DRAGON	Arcade classic	39.93
DEAD HEAT SCRAMBLE	4X4 Off road racing	69.95
DRAGONS LAIR	Dirk on the small screen	69.95
FINAL FANTASY	Adventure role play	69.95
FIST OF NORTH STAR	Martial arts	49.95
FLUPUL	Arcade puzzle	49.95
GOLF	Mario goes for par	39.95
HARMONY	Brainteasing puzzle action	49.95
IN YOUR FACE	Street basketball	59.95
KUNG FU MASTER	Martial arts action	
LACK 'N CHASE	Pac Man	59.95
LOOPZ	Link pieces to form loops	59.95
Motocross Maniacs	Motocross action	49.95
Nobungas Ambition	Japanese strategy 1MEG!	89.95
NEMESIS	Shoot em up	59.95
NFL FOOTBALL	American football	49.95
OPERATION C	Excellent arcade action	59.95
PIPE DREAM	Stop the water flow	49.95
PAPERBOY	Finish your paper route	69.95
POWER MISSION	Remember battleships?	69.95
POWER RACER	Arcade racing action	59.95
REVENGE OF THE GATOR	Pinball action	39.95
SKATE OR DIE	Skateboard action	59.95
Super Mario Land	All time favourite	39.95
Teenage Mutant Ninja Turtles	NEW RELEASE!!	69.95
TENNIS	Anyone for doubles	39.95

AND TOO MANY MORE TO MENTION!!!

SEGA MEGADRIVE

HARDWARE

SEGA MEGA DRIVE	Ultimate 16 bit arcade console	339.00
POWER BASE CONVERTER	Use of sega master system games	79.95
MEGA DRIVE CONTROLLER	Extra standard controller unit	29.95
MEGA CONTROL STICK	Arcade joystick	89.95

SOFTWARE

AFTER BURNER II	Jet fighter action	79.95
Alex Kid The Enchanted Castle	Arcade smash hit	59.95
Battle Squadron	Space shoot em up	79.95
Burning Force	sci-fi motobike action	79.95
Budokhan	Samurai action	79.95
Columns	new release	59.95
Cyberball	futuristic sports hit	69.95
Dynamic Dux	arcade action hit game	79.95
Dick Tracy	Dick is on the case	89.95
E-SWAT	police shoot em up	69.95
Forgotten Worlds	shoot em up	69.95
Ghost Busters	who ya gonna call ?	69.95
Ghouls & Ghosts	just like the arcade machine!	89.95
Golden Axe	best version ever seen !	79.95
Golf	sports fun	69.95
Herzog ZWE!	New release, Shoot em up	69.95
John Madden Football	American football	79.95
Last Battle	Arcade action	69.95
Mickey Mouse	Can you save Minnie	89.95
Mystic Defender	Axe em up	69.95
Moonwalker	Help Micheal save the kids	79.95
Phelios	Fantasy arcade adventure	79.95
POPULOUS	Strategy simulation	79.95
PHANTASY STAR II	role playing adventure	99.95
RAMBO III	machine gun mania	59.95
Space Harrier II	3D arcade shoot the lot!	79.95
Super Hang On	high speed bike racing WOW!	79.95
Super League Baseball	quality sports hit	69.95
Super Thunderblade	helicopter arcade hit	79.95
Sword Of Vermillion	new releas	99.95
Sword Of Sodan	Fantasy arcade action	79.95
SUPER MONACO GP	car racing super fun!	79.95
Revenge Of Shinobi	martial arts hit	69.95
Twin Hawk	new release	69.95
Thunderforce II	shoot em up	79.95
Truxton	new release	69.95
World Cup Italia 90 Soccer	Soccer game fun	69.95
Zoom	classic arcade puzzle game	59.95
Zany Golf	Classic golf put put	79.95

Hotline
0055 20511

"There's a Spot
near you"

BRISBANE

225 George Street
Brisbane, QLD 4000
Phone (07) 229 8011

BURWOOD

185 Burwood Road
Burwood, NSW 2134
Phone 744 8809

CHATSWOOD

Shop G9, The Gallery
Endeavour Street
Chatswood, 2067
Phone 419 2333

CITY

165 Castlereagh Street
Sydney, NSW 2000
Phone 261 4344

HURSTVILLE

185E Forest Road
Hurstville, NSW 2200
Phone 570 7333

LIVERPOOL

Shop 4, Westfield
Shopping T'n Macquarie St.
Liverpool, NSW 2170
Phone 601 7700

NEWCASTLE

80 Pacific Highway
Charlestown, NSW 2290
Phone (049) 42 1522

PARRAMATTA

Shop 21a, Greenway Arc.,
222 Church Street
Parramatta, NSW 2150
Phone 891 1170

PENRITH

Shop 1, Carvan Arcad
389 High Street
Penrith, NSW 2750
Phone (047) 32 3377

NOW OPEN

BONDI JUNCTION

110 Spring Street
Bondi Junction, NSW 2022
369 4355

MAIL ORDER FORM

Send to: Micro Computer Spot. Unit 3, Metro Centre. 38-46 South St. Rydalmere. NSW 2116

PRODUCT / PROGRAM NAME	COMPUTER	DISK TYPE	QUANTITY	PRICE

☐ Tick here for your FREE regular issues of Chip Chat magazine.

SUB-TOTAL

POSTAGE

TOTAL

Delivery Details

Name

Address

Telephone

For software only, add \$3 for post or \$15 for courier. For hardware call to arrange.
We will exercise all reasonable care in the processing of your orders but we accept no responsibility for orders, monies or products lost or delayed in transit. Your order will normally be processed within 48 hours, but please allow 14 working days for the fulfilment of orders. Telephone orders are, of course, welcome.

Whenever possible, please supply a phone number where contact can be made within normal working hours. **PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.**

DO NOT SEND CASH.

When paying by cheque please supply your home address and home telephone number together with normal working hours telephone number.

Payment Details

Cheque ☐ Postal order ☐

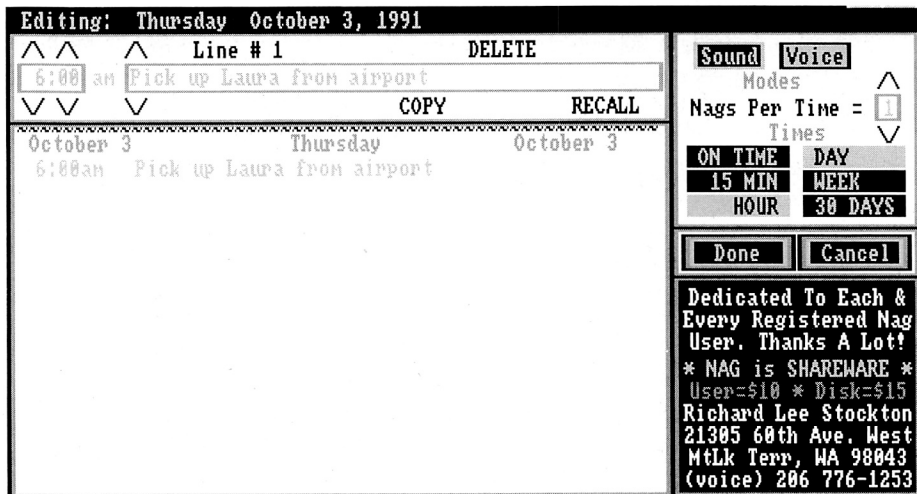
Bankcard ☐ Master Card ☐ Visa ☐ AGC ☐

Credit card no.

Valid from to

Name on card

Signature



Nag

data later without using cursor keys. Printing out data would get around this. Auto dialing of numbers from the database could be useful too.

Public Domain Programs

NAG. V1.6. Fish Disk 161

An endearing Shareware program that provides both visual and audible reminders for current items after boot up with a visual reminder only on boot up for missed events. The voice option is the internal "Say" program and speaks the message you type in. Once triggered it repeats at 30 second intervals until you acknowledge, hence the name *Nag*.

Installation is automatic but it is necessary to rename the year files which will contain your messages and special reminders such as anniversaries, bankcard payments etc. The two one year files supplied are out of date but it is just a matter of renaming them to 1991 and 1992, dumping unwanted data, and entering your own data to work them OK. If you don't update the year names it will tell you it can't find the file and sulk.

It is not a database as is just a diary, organiser and reminder. It does however have more room for messages and does automatically remind you of missed reminders on boot up and it's cheap. The main or message screen contains a calendar and edit, print and search facilities. It also allows you to shrink *Nag* to an Icon when finished for later easy access as necessary.

Clicking on a calendar date and then edit brings up the edit screen and allows entry, addition or modification of messages, selection of reminder times and whether to use voice or sound. Reminders can be on time, quarter hour, hourly, daily, weekly and up to 30 days in advance. The sound file can include up to 15k of a sound sample of your own choice.

A very useful program with an adequate text file for setting up and operating. It is currently running in background mode with *Who! What! When! Where!* to make sure I am not late with this article. Andrew please note, I shall not be late again.

Badger Fish Disk 365

One can easily understand why a developer of software hopes and certainly deserves to receive some reward for his or her labours, but Mr Kerber (the developer) seems paranoid about it with this shareware program. The program is good and relatively easy to use but we are constantly reminded to post in our contribution or else the program will self destruct shortly taking all data with it. Not exactly guaranteed to inspire confidence.

However, threats aside, the program is easily installed by Icon dragging but requires a small alteration to the startup sequence for automatic data checks on boot up. This alteration sets up the various options for *Badger* such as checking data every time you boot up or only once a day, colour options, help facilities and text attributes. On boot up relevant ap-

pointments are displayed full screen. Text file instructions for setting up and operation are a bit vague.

Operation for entry, search or edit etc. are by keyboard using either menu numbers or hotkey equivalents. Advance warnings can be up to 45 days. Repeat reminders can also be organised on a weekly or monthly basis. New events can be added, others searched for and information printed out as required. One unusual application is the ability to keep track of a person's age each birthday providing a reference date is given.

Reminders are visual only on boot up.

DTC (DeskTop Calendar) Fish disk 335


This is pure public domain software and obviously a very early version. Still if someone is looking for a small but useful diary program that works this may suit. It does however require you to remember the various keys that control functions as it is fully keyboard controlled. You must also consciously access the program to be reminded of appointments.

Information is sketchy on installation and a little bit of head scratching is necessary to get it up and running. Definitely one for hackers. Once up though it only requires keying the appropriate letter to bring up charts of appointments for day, week or month. Reminders are visual only. It will find free half hours for special activities and will show a listing of your free times as distinct from busy to allow easy reorganisation of your activities.

Appointments can be transferred to new times easily and groups of appointments can be moved en masse to new dates and times. The help facility presents a screen of the various instructions and the appropriate hotkeys. A useful but basic program.

Conclusion

My pick of the programs are *Who! What! When! Where!*, and *Nag*. both are easy to set up and use. Both have automatic visual and sound reminders and *Who! What! When! Where!* has a database with address label printout, auto phone dialling and alarm clock but *Nag* just won't let you forget. □



FAX: 558 9522

POST TO: PACIFIC MICROLAB, 277 ELIZABETH ST, MELBOURNE, VIC 3000

INTERLINK

**THE AMIGA
MAIL ORDER
LEADERS**

Bringing you the best for your AMIGA, at the best price!!

*** August
Specials**

ARCADE GAMES

ALCATRAZ	SOON	LINE OFFICE	54.90
ALTERED DESTINY	74.90	LOGICAL	66.90
ARACHNOPHOBIA	SOON	LOTUS ESPRIT TURBO II	SOON
*ARMOUR-GEDDON	58.90	N.A.R.C	64.90
BACK TO FUTURE III	66.90	NIGHT HUNTER	54.90
BATTLESTORM	76.90	NITRO	54.90
BILLY THE KID	SOON	PANZA KICK BOXING	64.90
CARVUP	64.90	PENTHOUSE JIGSAW	SOON
CHUCK ROCK	54.90	PREDATOR 2	66.90
CRIME WAVE	64.90	PRINCE OF PERSIA	54.50
E-SWAT	54.90	ROBOCOP II	64.90
GEISHA (R-RATED)	SOON	SILKWORM IV (SWIV)	64.90
*GODS	58.90	SIMULCRA	44.90
GREMLINS 2	44.90	STAR CONTROL	68.90
HARD DRIVIN II	54.90	STELLAR 7	57.90
HORROR ZOMBIES	57.90	STRIDER II	54.90
INSECTS IN SPACE	57.90	SUPER CARS II	66.90
JAMES POND	54.90	SUPER MONACO GP	64.90
KILLING CLOUD	64.90	SUPER OFF ROAD	54.50
LAST NINJA III	SOON	SWITCHBLADE II	64.90
LEMMINGS	64.90	THE POWER	57.90
		TURRICAN II	63.90
		VIZ (R-RATED)	54.90

STRATEGY

A.D.S	66.90	HARPOON SCENARIO ED	47.90
BATTLE COMMAND	64.90	HUNTER	SOON
BETRAYAL	66.90	LIFE & DEATH	66.90
BIG BUSINESS	66.90	LOOPZ	46.90
BLITZKREIG MAY 1940	54.90	M1 TANK PLATOON	74.90
*BRIDGE V6.0	46.50	MEGA-LO-MANIA	SOON
BRIGADE	SOON	MIDWINTER II	SOON
CENTURIAN-DEF ROME	57.90	MONOPOLY	74.90
CHAMPION OF THE RAJ	64.50	MOONBASE	64.90
COHORTS - FT ROME	76.90	NAM	74.90
DAS BOOT	64.90	NOBUNAGA'S AMBITION II	SOON
DEUTOROS	SOON	PANZER BATTLES	SOON
EPIC	SOON	POWERMONGER	46.90
ESCAPE FROM COLDITZ	74.90	POWERMONGER DATA	SOON
GALACTIC EMPIRE	65.90	*RAILROAD TYCOON	78.90
GUNBOAT	54.90	SHANGHAI II	SOON
HALLS OF MONTEZUMA	48.90	SILENT SERVICE II	SOON
HARPOON	64.90	SIM CITY DATA 1/2 (ea)	54.90
HARPOON DATA 2	45.90	SUPREMACY	64.90
HARPOON DATA 3	45.90	TOWER FRA	56.90
		UMS II	64.90
		WOLFPACK	74.90

SPORTS

4D SPORTS DRIVING	-AUG-	J. NICK COURSE 4/5 (ea)	37.90
AMIGA CRICKET	46.90	KICK OFF II	44.90
BRIDGE SIMULATOR	66.90	KICKOFF FINAL WHISTLE	36.90
*CRICKET CAPTAIN	54.90	*MONDAY NIGHT FOOTY	76.90
EUROPE SUPERLEAGUE	56.90	M.U.D.S	54.90
GAZZA II	64.90	PGA TOUR GOLF	56.90
G. GOOCH CRICKET	SOON	PRO TENNIS 2	64.90
INDIANAPOLIS 500	46.90	STORMBALL	56.90
J. NICKLAUS UNLTD	64.90	STREET ROD II	56.90
		TEAM SUZUKI	66.90
		ULTIMATE RIDE	66.90

ADVENTURE

AD & D COLLECTION	97.90	EYE OF BEHOLDER	56.90
BARD'S TALE III	56.90	HERO QUEST	66.90
*B.A.T	72.90	IMMORTAL	44.90
BUCK ROGERS	46.90	KING'S QUEST 2/3/4 (ea)	67.90
CADAVRE THE PAY-OFF	44.90	KING'S QUEST 5	CALL
CAPTIVE	54.90	LEGEND OF FAERGHAIL	56.90
CAPTIVE MISSION	SOON	LEIS SUIT LARRY V2 (ea)	54.90
CHAOS STRIKES BACK	56.90	LEISURE SUIT LARRY 3	64.90
COLONEL'S BEQUEST	64.90	LORD OF THE RINGS	SOON
*CORPORATION	44.90	MEGATRAVELLER 1	82.90
*CORPORATION MISS'N	34.90	*OBITU	67.90
CRUISE FOR A CORPSE	SOON	QUEST FOR GLORY II	66.90
DEATH KNIGHTS KRYNN	56.90	RENEGADE LEGION	57.90
DRAGON WARS	56.90	SEARCH FOR THE KING	64.90
DUCK TALES	54.90	SECRET MONKEY ISLAND	56.90
*DUNGEON MASTER	48.90	SECRET SILVER BLADE	56.90
*ELVIRA	66.90	SPACE QUEST I/II/III (ea)	56.90
		*WIZARDRY-BANE FORGE	76.90
		WONDERLAND	74.90

FLIGHT SIMS

BLUE MAX	64.90
*F15 STRIKE EAGLE II	78.90
F19 STEALTH FIGHTER	74.90
FALCON	46.90
FALCON MISSION DISK 2	36.90
FLIGHT OF INTRUDER	64.90
HAWK (BIRDS OF PREY)	SOON
MEGA FORTRESS (B-52)	66.90
MIG-29	74.90
PRO FLIGHT	86.90
RED BARON	SOON
SECRET W. LUFTWAFFE	SOON
THEIR FINEST HOUR	64.90
WINGS	76.90

FREECALL 008 ORDER LINE

9am-5pm Mon-Fri
(Credit Card Orders Only
No Enquiries Please)

008 020 633

(For all queries about prices and
availability please use our
Customer Service Line)

Please note that prices and
availability are subject to
change without notice. All
prices listed are for Mail Order
sales only. Any software
product without a price (i.e. with
"SOON") had not been released
as at 1/7/91 and was not
scheduled for release in August.

While we stock all released
items mentioned on this page it
is inevitable that stock levels
will vary through the month.

Those items preceded by "" are*
specials for ACAR readers for
August only or while stocks last.
When ordering please quote the
price listed here.

MULTIMEDIA

AMIGA VISION	169.00
*CAN DO	159.00
CAN DO INTRO PAK	49.90
CAN DO PRO PAK	49.90
DIRECTOR II	179.00
DIRECTOR TOOLKIT	54.50
ELAN PERFORMER II	179.00
HYPERBOOK	137.00

OVERNIGHT DELIVERY

\$10 per Parcel

Call for details
(weight and size
restrictions apply)

BUSINESS

ADVANTAGE	249.00	PAGESTR. FONTS (ea)	49.50
*CITY DESK V2.0	97.50	PAGESTREAM FORMS	57.90
*CONTACT	47.90	PEN PAL	189.00
CYGNUS ED PRO	109.00	PERS'L FINANCE MANG.	66.90
DATA RETRIEVE	95.00	PHASAR V4.0	98.90
DATA RET. PROFESS'L	189.00	PROFESS'L PAGE V2.0	399.00
DESKTOP BUDGET	89.50	PROWRITE V3.1	179.00
DG CALC	79.50	QUICKWRITE	85.90
EXCELLENCE V2.0	219.00	SAXON PUBLISHER	399.00
FLOW IDEA PROCES'R	119.00	SCRIBBLE PLATINUM	76.90
FREELANCE	48.90	SOFT CLIPS 1 - 4 (ea)	99.50
*GOLD DISK OFFICE	339.00	SUPERBASE	74.90
HAI CALC	75.00	SUPERBASE 2	119.00
HOME ACCOUNTS	83.90	SUPERBASE 4	499.00
HOME FRONT	125.00	SUPERPLAN	99.50
MAXIPLAN PLUS	89.00	SYSTEM 3	119.00
*PAGESETTER II	149.00	SYSTEM 3E	149.00
PAGESTREAM V2.1	349.00	TURBO TEXT	109.00
		WORKS PLATINUM	169.00
		YOUR FAMILY TREE v2	109.00

GRAPHICS

3D PROFESSIOANL	329.00	*INTROCAD PLUS	109.00
3D TEXT ANIMATOR	69.50	MODELLER 3D	105.00
AEGIS GRAPH. ST'R	79.50	PAGE FLIPPER +FX	169.00
ANIMATION STUDIO	199.00	PELICAN PRESS	139.00
ART DEPARTMENT	109.00	PRINTMASTER PLUS	54.90
*ART DEPARTM'NT PRO	279.00	PROFESSIONAL DRAW 2	245.00
CREDIT TEXT SCROLL	76.90	PROMOTION	109.00
DELUXE PAINT III	94.90	PRO VECTOR	395.00
DELUXE PHTOLAB	94.90	PRO VIDEO PLUS	339.00
DELUXE PRINT II	94.90	SCALA	599.00
DELUXE VIDEO III	94.90	SCENE GENERATOR	68.90
DESIGN 3-D	98.50	SPECTRACOLOR	109.00
DESIGN WORKS	149.00	TITLE PAGE	169.00
DIGI-MATE 3	54.50	TOP FORM II	139.00
DIGI-PAINT 3	109.00	TURBO SILVER 3D	159.00
DIGI-VIEW GOLD 4	249.00	TV TEXT PROF.	175.00
DIGI-WORKS 3D	169.00	ULTRA DESIGN	239.00
DRAW 4D	319.00	VISTA	86.90
FLOOR PLAN CONST. II	118.50	VISTA DATA DISKS (ea)	96.90
IMAGINE	399.00	VISTA PRO (Needs 3.5MB)	179.00
		X-CAD DESIGNER	199.00
		X-CAD PROFESSIONAL	399.00

UTILITIES

3D CONSTRUCTION KIT	129.00	GP TERM	99.00
AMIKIT (Tutorial)	56.90	HI-SOFT BASIC	179.00
AMOS	114.90	HI-SOFT C INTERPR.	SOON
AMOS COMPILER	69.50	HI-SOFT EXTENSION	64.90
AREXX	69.50	HI-SOFT PASCAL	SOON
ARGASM	169.00	HYPER HELPERS	76.90
ASSEMPRO	139.00	IMAGE FINDER	96.90
AZTEC C PROF. V5	299.00	KDV VIRUS KILLER	24.95
BENCHMARK MODULA-2	259.00	NO VIRUS	47.90
BENCHMARK LIB'S (ea)	139.00	*PIXEL SCRIPT	99.50
C.A.P.E. 68K ASSEMBL'R	99.50	POWERPACKER PRO	39.50
*CROSS DOS V4.0	48.90	PROJECT D V2.0	69.50
DEVPACK 2.0	149.00	QUARTERBACK V4.0	78.90
DIRECTORY OPUS II	48.90	QUARTERBACK TOOLS	88.90
DISK LABELER	59.50	SAS/LATTICE V5.1	399.00
DISK MECHANIC	109.00	*SAS/LATTICE C++	289.00
DOCTOR AMI	59.50	STARSOFT HD BACK	69.50
DOS LAB (Tutorial)	39.50	SUPERBACK	99.00
DUNLAP UTILITIES	76.90	SYNCR0 EXPRESS III	125.00
FAT TRACKS (Copier)	89.50	SYNCR0 EXP III A2000	149.00
GFA BASIC	129.00	VIDI	289.00
		XCOPY PROF. V3	129.00

MUSIC

AMAS	235.00
AUDIO ENGINEER	99.00
AUDIO ENG. JNR (mono)	189.00
*AUDIO ENG. PLUS	339.00
BARS AND PIPES	239.00
DELUXE MUSIC CS	96.90
DR T'S TIGER CUB	109.00

MICE

ALFADATA OPTICAL	99.50
AMTRAC TRACKERBALL	189.00
AGILER MOUSE	59.50
GENIUS MOUSE	59.50
GOLDEN IMAGE OPTIC'L	139.00
ROCTEC MOUSE	49.50
ZYDEC MOUSE	59.50

The Ultimate AMIGA Source

Flash 2000

SCSI Interface & RAM Expansion

In the July issue of ACAR we printed a picture on page 14 captioned GVP Hardcard. This picture was actually of the Flash 2000 from MAST.

The Flash 2000 is a combination 8/16 bit SCSI interface and 8 Mb RAM expansion card. Designed for the Amiga 2000 and 2500, this board provides all of your memory and/or hard disk/SCSI requirements on a single card, at an unprecedented low price.

"At last there is available an Australian designed Amiga SCSI/RAM card that combines the highest performance and the greatest flexibility with an unbelievably low price," said MAST's Daniel Koch. We've clocked the Flash at over 900k/sec transfer rates - and that's only in 8 bit mode! Boards this powerful used to break the bank, but no longer. Who says buying Aussie costs more?"

Features

8 bit SCSI interface

Optional 16 bit SuperCharged SCSI interface

Hard Card disk mounting

Extra Internal and External SCSI connectors

Full Rigid Disk Block compatibility

Autoboot from Fast File System partitions

Removable Media Support; Autoboot disable switch

Uses only one slot; Australian designed

RAM - The Flash 2000 has sockets for up to 8Mb of ZIP DRAMs. ZIPs are the new compact package for RAM chips (as used in the A3000), and can be re-used in the A3000 if you upgrade. 1 Mbit ZIPs may be used for 2 Mb of Fast RAM, or the new 4 Mbit ZIPs can be used, giving 2, 4 or 8 Mb. If desired, the RAM can be totally disabled. RAM can be factory installed or user installed, and is true contiguous Fast RAM, autoconfiguring and running with no wait states.

SCSI - This card is unique in providing *two* SCSI chip sockets. As well as the standard 8 bit chip there is provision for the new NCR 53C94 16 bit SCSI controller. This card has a 16 bit bus interface, and can transfer at speeds of up to 5 Mb/sec. With the 53C94 the Flash 2000 can provide **sustained** data transfer of over 1 Mb/sec using high performance drives. The 53C94 is available from the factory or as an upgrade kit.

DISK - In addition to all of this, there is space on the card to mount a 3.5" hard drive, thus freeing up your drive bays. All cabling is provided on board, including power. In addition, there is a second internal SCSI connector provided, making it a simple matter to add additional drives internally, as well as a 25 pin D-connector for external hard drives and other SCSI devices. Up to seven drives may be connected, giving a total possible storage well in excess of 10 Gigabytes!

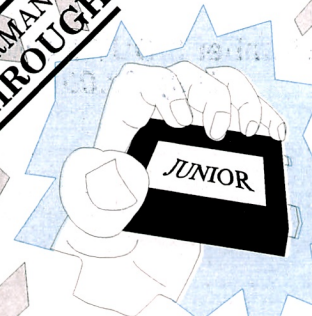
DRIVER - Flash uses MAST's latest SCSI driver, giving a host of features like ultra high performance, RDB compatibility, Autoboot from Fast File System partitions. Automount all drives and partitions, Removable Media support, easy setup and partitioning and more. In addition, Flash sports an Autoboot disable switch on the rear panel. This prevents the System from configuring any hard drives, thus giving you that little extra memory and speed when you need it most, and providing compatibility for badly-written software.

Available early July from MAST. Prices start at under \$300. □

RRP
**Only
\$189**

**PRICE-PERFORMANCE
BREAKTHROUGH**

GSOFT
Computer Products



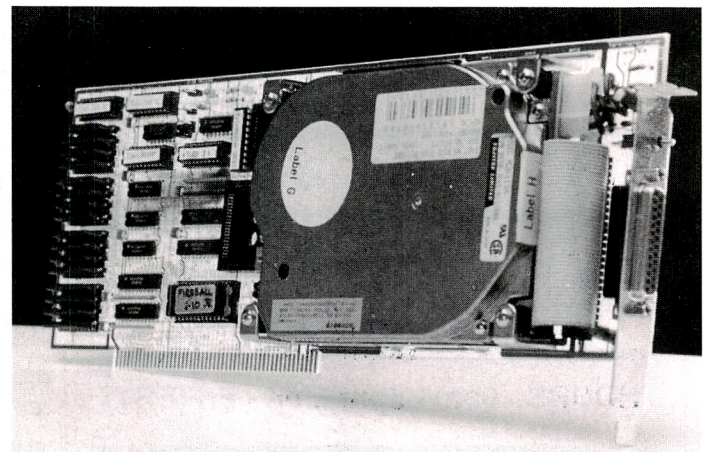
Audio Engineer
JUNIOR™

AT LAST! The breakthrough everyone has been waiting for in QUALITY AMIGA Audio. A premium quality Sampling and Editing package that won't break the bank. Comprising the World renowned AUDIO ENGINEER Software and a quality mono SAMPLER from the people who brought you the 5 STAR sampler package, Audio Engineer Plus.

Proudly MADE in AUSTRALIA
Contact Your dealer NOW

Dealer enquiries to GSOFT Pty Ltd
PO Box 59 Elizabeth SA 5114
Phone & Fax (08) 254 2261

Audio Engineer Junior and Audio Engineer Plus are Trademarks of RamScan Software Pty Ltd



FLASH 2000 from MAST

Advanced Dungeons & Dragons[®]

COMPUTER PRODUCTS

LIMITED EDITION COLLECTOR'S SET

FEATURING

- Pool of Radiance • Curse of the Azure Bonds • Hillsfar
- Heroes of the Lance • Dragons of Flame



Advanced
Dungeons & Dragons
COMPUTER PRODUCTS
Limited Edition
Collector's Set
Numbered Collector's
Certificate Included

© 1991 TSR, Inc.
© 1991 Strategic
Simulations, Inc.
All rights reserved.



AMIGA[™]



STRATEGIC SIMULATIONS, INC.[®]

Limited Edition Collector's Set - 5 Great Titles from SSI

ADVANCED DUNGEONS & DRAGONS, DRAGONLANCE, FORGOTTEN REALMS, and the TSR logo are trademarks owned by TSR, Inc., Lake Geneva, WI, USA, and used under license from Strategic Simulations Inc., Sunnyvale, CA, USA.



Distributed by:
Electronic Arts Pty Ltd
4/46 Smith Street
Southport, Queensland
Telephone 075 - 911388

**KEEP YOUR AMIGA
100% AMIGA
WITH GENUINE AMIGA
ADD ON'S FROM
COMMODORE. ONLY
GENUINE COMMODORE
ACCESSORIES GUARANTEE
FULL COMPATIBILITY
FULL CONNECTIVITY AND
FULL RELIABILITY 100%
OF THE TIME! FOR
- 100% PEACE OF MIND! -**



100% AMIGA!

A500 Accessories

- * A501 RAM expands A500 to 1Mb with battery backed up Clock and Calendar
- * A590 20Mb Hard Disk with room for 2Mb RAM
- * 1011 Slimline Disk Drive, also for A2000/3000
- * Alter Image Genlock and Software for Video
- * Alter Audio Midi and Software for Music
- * MPS 1230 Printer, also for A2000/3000
- * 1084S Monitor with stereo sound, video and S-VHS Input, also suits A2000/3000 (and your VCR!)

A2000/3000 Accessories

- * Multisync Monitor
- * A2301 Internal Genlock
- * Accelerator Cards, 68030 with RAM
- * Pc XT/AT Emulators
- * Display Enhancer Card for A2000 + Multisync
- * SCSI Controller and Hard Disk for A2000
- * Ram Cards expands up to 9Mb

**WE HAVE YOUR NEEDS COVERED WITH
GENUINE COMMODORE ADD ON'S**

See your Commodore
dealer for all you
need and all you
need to know.



Commodore
AMIGA

Things to do with words

by Anne Glover

Kids can do lots of things with words. For instance, they can fish them out of their alphabet soup before letting them slop onto the tablecloth. So proud of their discovery, they don't seem to realise that the rest of the family is actually eating their food. They mangle and mutilate the language, they play and joke with it as they become competent and literate. Everyday life with its street signs, books and TV programs will get them started and there are a rapidly expanding number of computer programs trying to help them on their way.

The aptly named *Things To Do With Words* is one such program. It has three games that are easy for young children to use and is designed for children aged between 5 and 12 years. According to the literature, a child of 7 years or older should be able to use it on their own. This program is produced by the people who developed *Puzzle Book 1* and 2.

Things To Do With Words is not one of the better products on the market, it is lacking in animation and excitement. Unless this program is a child's first exposure to the fascinating word of computers it is unlikely to achieve its aims, simply because it is not very interesting. Sure, cute little Buddy Bookbug pops up every now and again but he is really peripheral to the games.

The three games, or rather exercises, use pretty much a text book approach to word development skills. The range of possible techniques that can be used with a computer have not been exploited.

The first exercise, Anagrams, involves unscrambling a word so Buddy Bookbug will cheer for you. The screen is pretty drab, with a basically black background and coloured text. Students need to click on the centre of the square with the chosen letter as they spell the unscrambled word. Don't click off centre or the computer will ignore you, there is not enough margin for error in this one.

The levels of difficulty to be selected from are wide, so this activity does span the age range indicated (5-12 years); but I believe it is the only activity in the program that does cover that range of ages. It's not good enough to throw in one ac-

tivity that may suit some 5 year olds and then label the whole package as suitable for 5-12 year olds. This one is more suitable for 7-12 year olds.

The second game requires the child to unscramble sentences. They will need to be able to read, and read fairly well to be able to work on this one by themselves. It also has a few problems: words cannot be undone if you change your mind while unscrambling and the program does not recognise other correct forms of the sentence that is presented.

No predetermined level of difficulty can be set but the manual suggests that young or less able students simply PASS the sentences they are unable to handle. This would be very disruptive and discouraging for these students. They are more likely to have a shot at any answer and then be deflated by obtaining poor results. Conversely, if a pattern of skipping answers is established, they may whizz through the program skipping anything the slightest bit challenging.

Surely a better approach would be to group sentences of a particular level and allow the student to select their level. This is the way most programs handle the problem. Another approach could be, to provide a graded sequence of sentences, to allow children to work to their own level and perhaps skip a few levels along the way. The sentences themselves are not as useful as they could be, many are not using appropriate language.

"Word Hunt", the third and final exercise involves finding as many words as possible from a single word. You select the word from the 27 words presented to you. The student may be required to find 21 words using the letters in the word "GREAT" or 12 from "OCEAN".

This program is a pretty obvious example of plonking some fairly mundane (but useful) exercises onto a comput-

er to harness the novelty value of the computer and enhance the process of learning. That concept is quite acceptable, but so much more can be done.

Things To Do With Words may be of use in the classroom to reinforce the concepts covered and perhaps to inject a little bit of variety into the development of basic language skills. Teachers could use the program as an incentive when students have adequately completed their section of work or it could be used alongside more traditional methods. It does use the lower case letters only and presents the letters on the screen when necessary. Confusion with the upper case keyboard is reduced as a result.

As more and more children become familiar with computers and their wide ranging capabilities, both at home and at school, the place for a program such as this one will all but die off. The computer will no longer be a novelty, and much more will be expected of such software.

A designer with a little bit of imagination in the early stages could have done a lot more with this program.

Conclusion

Three fairly boring word games, contained within fairly dated software. The program is easy to use and 7 year olds could operate it on their own. Two of the three games don't cover the age range indicated. Possible applications include reinforcing classroom activities in an alternative way or filling a gap in language development. Don't expect experienced computer buffs of 7 or 8 years of age to sit still with this one for long, but at least its price won't break the budget. □

Distributed by: **Pactronics**
ph:02 748 4700 RRP \$39.95



TALK TO YOUR TELEVISION

CDTV AVAILABLE FROM

Myer, Grace Bros, Norman Ross, Harvey Norman,
Bing Lee and following dealers

NSW: The Hard Disk Cafe, Shop 4 Computers, Free
Home Demo, Casino Computers, Fairfield Computers,
Leeton Audiotronics, Chanticleer Video Computer
Centre.

Vic: High Technology, Maxwell's, Cranbourne
Computers, Webbs Electronics, Jennings Discounts,
Compu Magic, Roylane, Frank Day & Associates,
St. Albans Home Entertainment

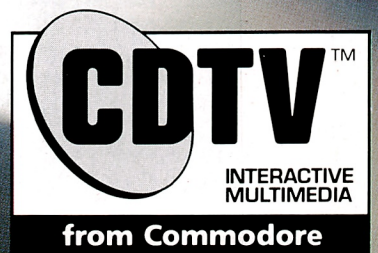
Qld: United Computers, Tropical TV Services,
City Computer Centre, Active Computers

SA: Harris Scarfe, Pick'n'pay Hypermarket

Tas: Angus & Robertson, Quadrant Computer Centre,
The Floppy Shop

WA: Hedlam Computers, Narrogin Computers,
Computer Corner, Regional Computers

Phone Chris Dee (02)428 7777 for a dealer near you



Things To Do With Numbers

by Anne Glover

This program, as the name suggests is produced by the same designers as *Things To Do With Words*. It also has a long way to go before it could be considered to be an indispensable program. To the producers' credit however, they have continued their development and *Puzzle Book 1 & 2* have emerged as more valuable programs.

Once again there are three activities - I wouldn't call them games. The first involves converting analogue time to digital time with the graphics of an analogue clock and a digital watch on the screen. The time is determined in 24 hour format, a useful concept, but fairly limiting in its scope. To be able to turn the clock from 24 hours to 12 hours would increase the flexibility of the program and suit a wider range of age groups.

After "a.m." or "p.m." flashes on the watch for only a few seconds the child is required to input the converted time. A child with a poor concentration span or one that is simply interested in looking at everything will frequently miss this vital piece of information. It may help to train children to be more organized and to follow a sequence of actions. It would be more useful however, to leave the "a.m." or "p.m." on the screen while they are working. This would avoid a great deal of frustration and many discouraging results.

The next activity has Buddy Bookbug searching for his mate Betty within a grid of books. A useful concept with some

reasonable graphics, but once again, things are flashing on and off too quickly, frequently before a child can collect the relevant clues.

Finally, a number game that requires the child to recognise one number as a component of other numbers is presented. For example the child may be asked to put 21 passengers on the train using only the numbers 6 and 3. Again a very specific task and one that may be useful to reinforce this concept in the classroom.

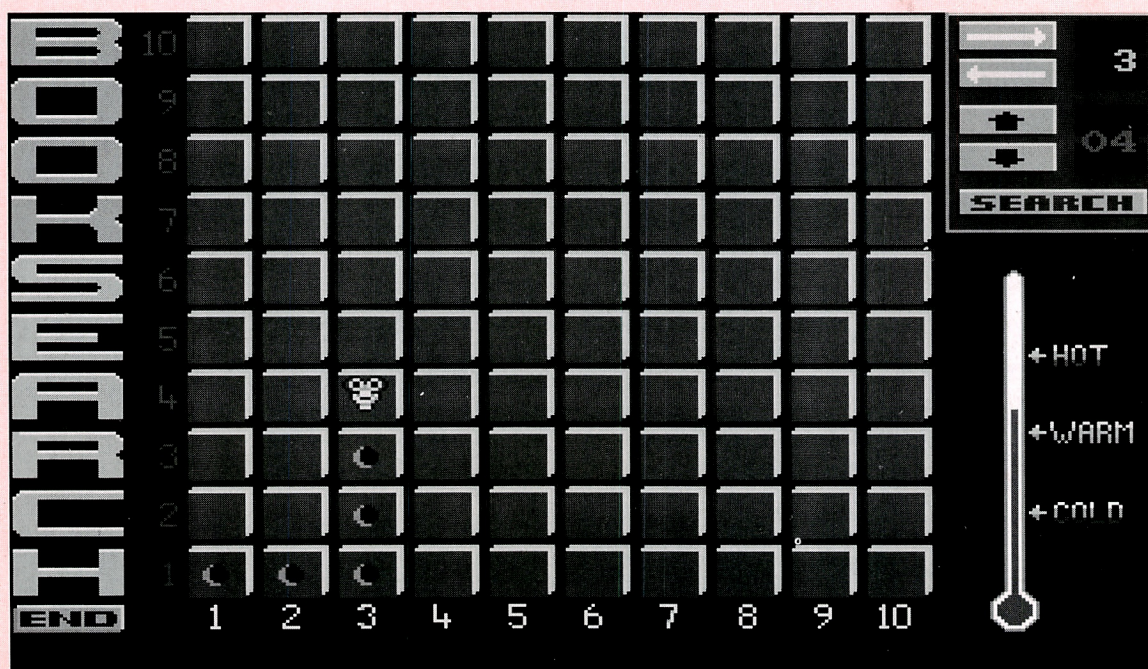
This program has some good points. It doesn't make nasty noises after an unsuccessful attempt at a question and generally the correct answer is presented after three tries. The program is easy to use and seven year olds could probably use it on their own.

Conclusion

This program represents a starting point only - it is not all there yet. The tasks covered are very specific and only three activities are included. I don't believe it adequately spans the 5-12 age group indicated. Nor does it provide the three levels of difficulty indicated on the box in each activity.

There are plenty of better programs around for children in this age group. Ones that are a lot more fun, that cover a greater range of activities and include a more extensive educational component. So do the kids a favour and buy them something else. It may be slightly more expensive, but it will be much more economical in the long run as it will be used more frequently and will be much more likely to achieve the goals you had in mind when purchasing your computer. □

Distributed by:
Pactronics
02 748 4700
RRP \$39.95





thanks all participants,
exhibitors, user groups, staff,
equipment sponsors, JVC, GB City,
Falk Electrosound-NAD, 2MMM,
and all attendants including
AMIGA SUPPORTERS
at the "World of Commodore".

Your enthusiasm, dedication
and friendship at the
World of Commodore
Exhibition in July '91,
contributed to a fantastic and
successful show.

We've done it again!

Thank you!

Tutorial

Coming to grips with the Amiga's CLI A Tutorial for Beginners PART 13

by Andrew Leniart

In the very first instalment of this series, I covered a few of the most commonly used commands in the Cli. Those being CD to change a directory, Dir to view one, List and so on. Back then, I only went into these very briefly and promised to go over some of the less used options of these commands at a later date. This issue, I plan to make good that promise.

Dir

Let's start with DIR. Issued on its own, it simply shows us on screen what the current directory has within it. But there is a lot more to it than that. The command, like most, has various options which are not immediately obvious (cha cha cha!) Most will have used the "Dir opt a" option to get a full geiser at what is on a whole disk. But have a try of this nifty little option..

Dir opt i

What this does is start you with a listing of the very first item in the current directory. This can sometimes be a file or even a whole directory. This is a handy feature because while in this mode of the command, you can do various things.

Let's say you had a disk full of public domain programs and you found you were only ever using a couple of them. By putting that disk in DF1: and doing a Dir opt I on it, you could clean it up quite easily by using DEL one by one.

This is a little hard to visualize so let's do a little bit of experimenting. Make a COPY of any disk and place it in the external drive. Then type Dir DF1: Opt I. Single drive users will first need

to type Dir ? and then switch disks to their copied one when the command arguments come up and then enter Opt I to get the process started.

You should have in front of you something similar to this ...

FileName ? or DirectoryName ?

The Amiga is using the question mark to ask you what it is you want to do to that file or directory. You can Delete it if you wish by simply typing DEL, which is a shorthand way Dos will accept this command when in this mode, and then pressing Return. (Note that if it is a directory, it must be empty before the Amiga will delete it). This is a convenient method of cleaning up a disk looking at each individual file one by one and deciding whether or not you wish to keep it. But there is more ...

Let's say we have gone digging around the PD libraries and come up with a disk full of interesting script files and we wish to explore the disk and at the same time view some of them. Using the Dir Opt I command, we can do so by simply typing a "t" at the question mark prompt. This is just the same as issuing the command "Type Textfile". You can pause the display at any time by pressing a key and then continue with the return key or backspace.

Sometimes when using this option, you may accidentally try to type a file which may look like a text file, but is actually a program. The result will be a screen full of garbage which can look quite alarming to a beginner. But no harm done, just press Ctrl-C and the garbage will stop. Then just continue on where you left off.

At any time when using the i option of Dir, you can move to the next file in line by pressing Return on it's own. To end the whole process, enter a q for quit and it's finished. As with most commands, you can also stop it with another Ctrl-C as well.

So what other little quirks are hidden in this commonly used command? With a little bit of imagination and a sense of daring, we can do other weird and wonderful things. For example, doing a Dir Opt A on a disk cram packed with files in intermingled directories is all fine and well, but you need to do it several times before you can start to remember what and where everything is.

Why not make life easier and create a reference of the really full directories on that disk so that you can look back on it?!. Working through each individual directory on the disk, you can create a hardcopy of the disk's contents via your printer by redirecting the Dir listing to it like so...

Dir > prt:

But shucks, with the way things are going these days with the economy and all, who can afford a printer? No problem, just modify the above command a little by leaving out the colon and create text files instead. Try this to see what I mean ...

Dir > Ram:Prt

Bingo! One you beaut text file sitting in Ram called Prt. And the government can't tax you on it one cent. You don't even need to declare it as an asset on your tax return.

Jokes aside though, you can now view this file at your convenience by TYPEing it in the Cli or better still, use a text viewing utility such as MORE on your Workbench to view it when you want to. If you want to make a permanent record of it, then COPY it to floppy disk.

Just remember that if you are going to do more than one directory of a disk in this way, then don't forget to change the filename for each directory. Naturally, it is possible to save directly to floppy disk right away if you want to. Ie:

Dir > DF1:FileName

Okay, so much of Dir for one issue. Moving right along to another method of viewing files and getting information out of a disk, we come to the LIST command.

Continued on p46

DynaCADD

Lightning fast 2D and True 3D Design and Drafting software for Electrical, Mechanical, Architectural & Civil applications. 3 Versions supplied (68000/020/030)

Reads & Writes Industry standard file formats:- DXF (in / out), HPGL, DMPL, P/Script, GEM, Xerox Ventura, (out)

Easy to use with graphical interface. Functionally the same as the IBM version. Some of the features include:

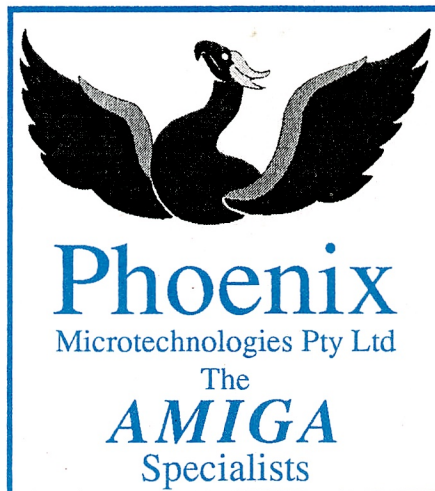
- Agfa Compugraphic Fonts
- Auto dimensioning
- Accurate to 16 decimal places
- Translation of 3D coordinate planes
- Dynamic rotation along GCP axis of any view
- Automatic generation of orthographic view
- Full plotter and printer support
- Selectively hide entities
- Sectioning and Crosshatching in 2D and 3D
- Transform entities from 2D to 3D

4 Disk Demo Version available
with manual - \$20.00
refundable upon purchase of package

\$1270.00

Version 2 - Supports Ray Tracing
Programs - **In Stock**

Kickstart Swap Switch	\$49.95
3 ROM Sockets & Ribbon Cable	
Digitiser / Colour Splitter	\$439.00
Audio Digitisers	\$49.95
Canon BubbleJet Printers from	\$675.00
Parallel Port I/O Board	\$120.00
Amiga Chips in Stock	P.O.A.
Drive Swap Switch	\$30.00
Flicker Filter	\$25.00
3.5" Floppy Drives from	\$159.00



CSA

Mega Midget Racers

68030 Accelerator Boards for the AMIGA 500/1000/2000

25Mhz and 33Mhz models.

Base board comes with sockets for up to 2Megs of Static RAM and a socket for 68881/2 Maths Co-Processor and Crystal. Full 68000 fallback.

Mega Memory Board can be purchased with the Base board or at a later date. Sockets for up to 8Megs of 32Bit Fast RAM.

These boards are simply the best available.

\$1699 - 25Mhz/68881/2MegDRAM

Sole Australian & New Zealand Distributors

Introductory Prices

Base 25Mhz	\$ 949
Base 33Mhz	\$1099
Mega Memory Board 0K	\$ 499
512K Static RAM	\$ 199
68881 - 20Mhz	\$ 170

8Meg Boards for A1000's

0K	\$349.00
1Meg	\$429.00
2Meg	\$529.00

A3000's in stock
A3000 UNIX Specialists

Dealer Enquiries welcome on all Products

Phoenix Board - Replacement Motherboard for the AMIGA 1000

Complete with - Obese (1Meg) Agnus, 2Megs RAM (1Meg Chip) on motherboard, 68881 Socket, Drive Swap Switch, Sockets for up to 4 Kickstarts (1.3 in ROM supplied) with 2 way switch, SCSI Controller and Software on main board, A2000 Expansion Slot, A2000 Video Slot, Connector for 8Meg Daughterboard, Battery Backed Real Time Clock. - **\$945.00**

Internal Hard Drive - This is a 52Meg Quantum SCSI Hard Drive (17ms) that comes complete with Mounting Brackets, Data and Power Cables, TriColour LED and instructions for fitting inside your original AMIGA 1000 case. Other sizes are available on request. - **\$699.00**

Options -	8Meg Daughterboard	\$250.00	Hard Drive Mounting Kit	\$ 45.00
	SCSI Extension Cable	\$ 30.00	Maths Co-Processors from	\$130.00
	Install - Phoenix Board	\$ 50.00	Install - Hard Drive	\$ 40.00

Phoenix Microtechnologies Pty Ltd, 18 Hampton Road, Keswick, South Australia 5035
Phone (08) 293 8752 Fax (08) 293 8814 Hours - Mon-Fri 8:45 - 6.00 Sat 10:00 - 1:00

List

List has a bit of an advantage over Dir in that it gives you far more info on each directory or file that's on your disk. Enter LIST at the Cli prompt and you will get exactly that. A listing of all the files and directories in the current directory. But along with that listing you also get the following good info ...

A Dir after the name if it is a directory and not a file. If it is a file, then you get the file size in bytes instead.

Next column to the right tells you the status of the protection bits which are set or not set on the file or directory respectively. If a protection bit is set, then its letter appears, if it's not set, you get a minus sign instead. A typical file might look like this..

Ed 19564 --p-rwd 28-Mar-89 18:09:58 :Commodore supplied text editor. Not very user friendly..

The eight letters in the protection bits stand for Hidden, Script, Pure, Archived, Readable, Writable, Editable and Deletable in that order.

The next entry tells us the date that the file was installed or last altered. If the file has been installed or altered no more than one day before, then the date is given as Yesterday or Today.

Same thing goes for the time as does for date. It gives you the exact time someone had last fiddled with the file.

Now on my Ed file, I have added the comment that you see written above. Later on, I'll show you how you can put com-

ments onto your own files. These little comments are excellent to jolt one's memory when it's been a while since you used a given program or file on your disks.

List Options

Just like we saved a file in ram with Dir by using the redirection > symbol, we can likewise save a listing to a file by using Lists to option. For example,

List to Ram:FileName

to save to a file in Ram: or similarly,

List to Prt:

to get a hardcopy from that printer you paid some of those hard earned taxes on.

You can also suppress some of the information that List provides if you don't have a need to see it. List NoDates will give a listing of a file or files without the dates. There is actually an option List Dates as well, but why this exists is beyond me as the command defaults to showing the dates anyway. Perhaps when originally designed and coded, it did not have that default (?)

A couple of interesting options are **Since** and **UpTo**. If you type in the command with the following parameters, **List Since 15-Jan-90**

then you would get a listing of files and directories which had been created on or after the 15th of January 1990. Likewise, if you type in,

List UpTo 15-Jan-90

then the Amiga will only display the files and directories created before or on the 15th of January 1990. Useful if you know a file was created on or before a certain date and you wish to quickly find it.

Not to be outdone by the Dir command and in order to try and sway you to using it more often, List is also capable of displaying a disk in much the same way as Dir does. Simply use List Quick.

Another useless option thrown into a command when another command does virtually exactly the same thing (?) I don't know, but I can't think of why anyone would prefer to type List Quick instead of Dir ... I guess life is full of little mysteries and computing has to have its fair share of them as well to complicate issues.

Concluding

I must admit to being a bit slack with this issue and leaving it to the last minute before getting to work on it. A little light on quantity, but I have tried to make it nice and meaty in quality. In any case, I'll make up for it next month with some replies to a few of your letters thrown in for good measure. Till then, keep hammering that keyboard ... □

CPA Leaders in the Multimedia Arena. Commercial Productions of Australia Professional Video Solutions.

Leading Edge
in Software Solutions

Video Edit Suites.



Our experienced Staff will help you make the right decision in Hardware platforms, Software, installation, training and maintenance

- Make your own Productions -

For your next Boardroom or Conference Presentation get your ideas and concepts across, live or on Video, with Titles, Stills, Graphics and Animations all synced with Music or Audio.

CPA also offers the following Bureau facilities:

- Logo Design
- On/of line Editing
- Print Facilities
- Genlock Facilities
- Full Training on Graphics and Animation
- Digitizing & 24 Bit Graphics
- Stop frame editing to S-VHS or 3/4"
- Rendering Ray traced Screens
- Corporate Video

Ask about our Corporate Education Training programs
Call Garry Cohen Now on 337 6255 or 018 247 133

**Contact Andrew Leniart on his
Bulletin Board System: Andy's
Attic BBS 03-749-4897**

The Geos Column

Laser output available

Last month I mentioned a laser printing service to cater for GEOS users. The good news is that it's now up and running. Laser Mode is the name of the bureau, and it's run by Laurent Rinaldi.

All GEOS applications are supported. The results obtainable from *GeoPublish* have to be seen to be believed!

Laurent tells me that to get the best results you should use LaserWriter resident fonts: LW California, LW Roma, LW Burrows and LW Greek. Regular GEOS fonts work fine, but you'll only get output equivalent to the screen resolution. You can of course use italics, bold, outline etc and fonts can be of any size at all.

Prices are a very reasonable \$0.80/page for *GeoWrite* documents using LaserWriter fonts, \$1.00/page for a document not using Laser fonts, *GeoPaint* documents are \$0.80, and *GeoPublish* documents are \$1.00/page. Quantity discounts are available (call for details).

To get your documents printed, send your GEOS disk (single sided if you're a 128 user) to 9/4 Durham Close, North Ryde, NSW 2113. You can also send your files in using a modem providing they've been converted first. If you're after more information you can contact Laurent on (02) 888 3329 or (02) 922 6355.

Gateway

A number of readers have sent me news clips on *Gateway*. *Gateway* is an alternative to the regular GEOS desktop, which I'm told will be more appealing to the tastes of some users. It's smaller and faster. The price is around \$US29.95 or comes bundled with RamLink and RamDrive. Hopefully I'll have some more information on *Gateway* soon.

Chris Brand is a talented programmer with a special liking for GEOS. One of

his original programs, *The Font Machine*, is a full-featured font creation and editing system.

The Font Machine is just what you need if you want more creative font styles, larger fonts or just want to try your hand at designing weird and wonderful graphic symbols.

When you double-click *Font Machine* you are given the opportunity to open an existing font file from disk or create a new one from scratch. You aren't limited to opening only the fonts that have been previously created with *Font Machine* - you can open any font at all.

This is useful if you want to create a new look to an existing font but don't want to redefine full stops, exclamation marks and other characters.

The actual editing process is very similar to using *GeoPaint* with the pencil tool. Clicking on a blank pixel will put you in draw mode and clicking on an occupied pixel will give you the eraser. I found editing of small fonts awkward when using the mouse. The screen changes slower than your mouse movements and often a straight line is difficult to achieve. This is easily remedied by using the cursor keys, which are fully supported.

One great feature of *The Font Machine* is the ability to create big 48 point fonts. Great if you're a *GeoPublish* user or just want to make an impact. Unfortunately GEOS doesn't like font definition files any larger than about 6000 bytes - limiting if you want a 48 point font. To keep the file size down you can just create the characters you need. If you don't need lower case letters then just leave them out. You do need to be careful about file sizing, since *The Font Machine* won't warn you that a file is too large to be used. Perhaps in a future update?

Creating fonts is a long and some-

times frustrating process. *The Font Machine* won't make the job any quicker or less tedious, but for the patient user with the skill it's the perfect program.

How do you get *The Font Machine*? Chris has very kindly allowed me to distribute it as part of the User Software Compilation disk I'm putting together. Also from Chris will be an MCS810 printer driver which gives much greater control and flexibility for your GEOS printing, some new mouse drivers (including one with a screen blanker), and some GEOS fonts that have been created with *The Font Machine*. Work on the disk is in its final stages and should hopefully be ready soon after you read this. Watch out for information in an upcoming column.

Chris also tells me that he's open to requests for programs. Here's my list!

- * A GEOS-based directory utility. Something along the lines of DirUtil on the Amiga would be nice. Simple and straight forward DOS access is something the C64 really lacks.

- * A GEOS equivalent of the Amiga's CLI. Wanting a Command Line Interface may sound like defeating the purpose of GEOS, but often it would seem quicker and easier to type "DELETE FILE1" than go through the process of dragging a ghosted icon down to the trashcan. I love the graphic environment, but I also love quick, clear access to functions.

- * A utility to convert regular C64 screen fonts to GEOS format. Not an easy task, but it'd sure be nice!

Letters

From the mail this month, Hamish Blunk of Beaudesert, QLD, writes:

"Dear Owen, While using GEOS I use a Commodore MPS 1230 printer. I find using the "Comm. Compat." printer driver is usually slow and does not print a total width of a page with some applications. But by experimenting with some different printer drivers and altering the set-up procedure of the printer I have been able to make the printing faster and also print a fullwidth page.

"First of all you have to change some settings in the set-up procedure:

```
Change PRINTER EMULATOR to
EPSON FX 80
Change DOUBLE STRIKE PRINTING to
BIDIRECTIONAL
Change ENABLE D.L.L. to YES 4K
BYTE LINE BUFFER
```


Change LINE FEED to LF=LF

Change CARRIAGE RETURN to CR=CR Change LINE SPACING to 7/72

Change BIRECTIONAL B.I.M. to YES

"Leave the rest of the settings as the Default settings, and make sure you store the changes.

"Last of all change the printer driver to 'Epson FX-80'. Although it is a lengthy procedure it is well worth it.

"Do you know of any way of being able to set up GEOS so that within an application you can change disks with only one disk drive. I find that when using applications such as geoPublish I have little room left on my disk (geoPublish takes up 99 KBytes).

"One last thing. Have you heard of a magazine in Australia called "GEOWORLD"? I got a brochure for it when I purchased *GeoPublish* this month. It is an American magazine, but it is not published by Berkley. The subscription cost \$US50 which could get rather expensive."

Thanks for the printer information. I don't use an MPS 1230 printer myself, but I'm sure many users out there that do are grateful.

The reason why GEOS likes to have the application and the datafile on the one disk is because it needs access to both at frequent intervals.

To run large applications GEOS uses 'overlays' so that only the necessary code is loaded as needed. Also, GEOS saves and retrieves parts of your documents as needed to save space. Re-

member, you're working with only a 64K computer so some sacrifices have to be made. That's why you can't always open datafiles from disks not containing the relevant application.

I have heard many good things about *GeoWorld*, but whether it's worth the \$US50 subscription price is a decision that's yours alone to make.

Mr W. Reed of Salisbury Park writes:

"Dear Owen, I'm hoping you may be able to help me. I use GEOS V1.3 which works fine with my Epson printer (dot matrix) but for letter quality print I would like to use my Commodore DPS 1101 Daisy Wheel printer. Could you please help as I don't seem to be able to find a driver for it. I've tried all of the drivers on the GEOS disk but to no avail."

GEOS is a 'graphic' environment. It works with bit-mapped images for text and pictures. Because the daisy wheel printer has no facilities for printing graphics it can't handle the output from V1.3.

V2 of GEOS does give you the option of using your printer's NLQ mode. This dumps the text to the printer and not the graphic information. I can't guarantee that it'd work, but it's quite possible you could print in GEOS V2's NLQ mode using the Commodore Compatible driver and your DPS 1101. Has anyone had success with this setup?

That's it for this month. Remember that if you have an interesting PD GEOS program, or tips, questions or suggestions, write to: ACAR, PO Box 288, Gladesville, NSW 2111. □

Desktop Utilities

PO Box 3053, Manuka, ACT 2603

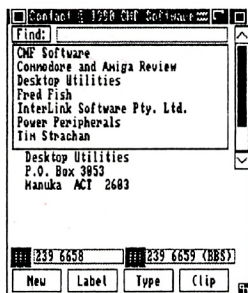
Phone: Canberra (06) 239 6658

BBS: 239 6659 Fax: 239 6619

PostDriver



The Preferences driver for PostScript devices. Print output from any program - no need to change emulations.



Compact, memory resident; ARexx port.

What's more practical than a traditional database?

Contact 1.2

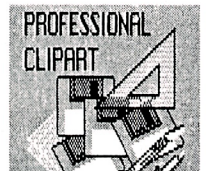
Personal Contacts Manager/Database

Why?

Because it fits in with what you're doing, and works with you as you do it, with the minimum of fuss.

- Instant access by hotkey • Fast & easy to use
- Resizable window • Selectable data files
- Autosave and autosort • Audio tone dialling
- Includes CalcKey, popular memory-resident calculator

Available from any well-stocked dealer.



Volumes 1 & 2

Structured clips for ProPage, ProDraw & PageStream. Australian themes included.



Maths for K-6! Three skill levels. Popular Australian animals featured.

AMIGA BUREAU SERVICES

SOFTWARE DISTRIBUTION
SCANNING
LASER PRINTING
COLOUR INKJET PRINTING
FILE CONVERSION
TRAINING

SHARP SCANNERS, COLOUR INKJET AND POLOROID CI 3000 FILM RECORDER

From INOVatronics/Desktop Utilities:

CanDo 1.5

Object-based programming; Price includes User Group Membership: newsletters, disks at discount, BBS **CanDo Intro Pack, CanDoProPower Pack \$51 ea.**

Examples and help with CanDo programming

Power Windows

Window prototyping package for programmers

Your dealer should have these now!

WE CAN BEAT ANY ADVERTISED PRICE! BUT WE SELDOM HAVE TO - OUR PRICES ARE THE LOWEST! (IF YOU SEE A LOWER PRICED ITEM, TELL US, IF YOU DON'T, TELL YOUR FRIENDS.)

Mail Order Form To: Logico, P.O. Box 572, Marrickville NSW, 2204

LOGICO
S O F T W A R E

TELEPHONE: (02) 550 0727

AMIGA		AMIGA		AMIGA		AMIGA		AMIGA		COMMODORE 64/128	
ARCADE		ADVENTURE		SPORTS		GRAPHICS & ART		MUSIC		ENTERTAINMENT	ENTERTAINMENT cont
Arachnophobia	44.95	B.A.T.	76.95	4D Boxing	64.95	3D Professional	324.95	Amas	234.95	Atomic Robokid	36.95
Armour-Geddon	64.95	Bard's Tale III	54.95	Amiga Cricket	44.95	3D Text Animator	68.95	Audio Engineer Plus	389.95	Back to the Future 2	36.95
Atomic Robo Kid	54.95	Buck Rogers	44.95	Bridge Simulator	64.95	Aegis Graph. Str.	78.95	Audio Master III	119.95	Battle Chess	36.95
Awesome (w/T shirt)	74.95	Cadaver 3D	44.95	Celica GT-4 Rally	54.95	Animation Studio	194.95	Bars & Pipes	234.95	Blades of Steel	36.95
Awesome Hottest	74.95	Captive	54.95	Greg Norman Golf	54.95	Art Department	104.95	Bars & Pipes Prof.	499.95	Buck Rogers	36.95
Back to the future III	64.95	Captive Mission	TBA	Indianapolis 500	44.95	Art Department Pro	284.95	Dr T's Copyist Appr.	139.95	Carriers at War	36.95
Badlands	64.95	Chaos Strikes Back	64.95	J. Nicklaus Unlimited	74.95	Deluxe Paint III	93.95	Dr T's Copyist DTP	399.95	Castlemania	36.95
Bar Games	54.95	Codename Iceman	64.95	Om. Play Basketball	64.95	Deluxe Photo Lab	93.95	Dr T's Tiger Cub	104.95	Champions of Krynn	46.95
Battlestorm	64.95	Colonels Bequest	64.95	M.U.D.S.	64.95	Deluxe Print II	93.95	Master Sound	109.95	Chessmaster 2100	46.95
Carvup	64.95	Corporation	54.95	Paris-Dakar Rally	54.95	Deluxe Video III	93.95	Master Tracks Prof.	499.95	Days of Thunder	46.95
Chase HQ 2	54.95	Corporation Mission	64.95	PGA World Tour Golf	54.95	Design 3-D	97.95	Perfect Sound	169.95	Double Dragon II	36.95
Crime Wave	64.95	Conquest of camelot	64.95	Pro Tennis 2	64.95	Digi-Mate 3	53.95	Quartet	94.95	Dragon Ninja	36.95
Dragon's Lair II	54.95	Curse Azure Bonds	44.95	Ultimate Ride	64.95	Digi-Print 3	104.95	Sound Express	119.95	E-Swat	36.95
E-Swat	54.95	Death Knights Krynn	54.95	World Cup Soccer	44.95	Digi-View Gold 4	259.95				
Fist of Fury (4 in 1)	64.95	Dragon Wars	74.95								
Fimbo's Quest	54.95	Duck Tales	54.95								
Flood	44.95	Elvira	74.95								
Ghosts & Goblins	44.95	Eye of Beholder	54.95								
Gode	64.95	Hero's Quest	64.95								
Grenlins 2	54.95	Immortal	44.95								
Hammerfist	44.95	Knights of Legend	TBA								
Hard Drivin II	64.95	Legend of Faerghall	54.95								
Ilyad	T.B.A	Leisure Suit Larry I/II	54.95								
Ishido	64.95	Leisure Suit Larry III	64.95								
James Pond	54.95	Loom	64.95								
Judge Dredd	54.95	Manhunter II	54.95								
Jupiter Master Drive	64.95	Mean Streets	64.95								
Last Ninja Remix	64.95	Might & Magic II	54.95								
Lemmings	64.95	Mortville Manor	37.95								
Line Of Fire	54.95	Night Breed 3D	54.95								
Lotus Esprit Turbo	64.95	Obitus	84.95								
Midnight Resistance	54.95	Police Quest I/II	54.95								
Mighty Bombjack	64.95	Pools of Radiance	44.95								
Monty Python	54.95	Search for the King	64.95								
N.A.R.C.	64.95	Secret monkey Isl'nd	64.95								
Narco Police	64.95	Secret silver blade	54.95								
Night Hunter	54.95	Wizardry-bane forge	79.95								
Ninja Warriors	54.95										
Nitro	54.95										
Operation Combat	54.95										
Pang	54.95										
Panza Kick Boxing	64.95										
Precious Metal	54.95										

AMIGA 500

512K RAM

ONLY \$76

INC. ON/OFF SWITCH & CLOCK

SIMULATORS

10 Tank Killer	64.95
Blue Max	64.95
F15 Strike Eagle II	74.95
F16 Combat Pilot	54.95
F19 Stealth Fighter	84.95
F20 Retaliator II	TBA
Falcon	54.95
Falc'n Mission disk 2	44.95
Flight of the Intruder	74.95
MIG-29	74.95
Secret W.Luftwaffe	TBA
Their Finest Hour	64.95

BUSINESS

Day By Day	54.95
Desktop Budget	88.95
Easy Ledgers	364.95
Gold Disk Office	344.95
Home Accounts	82.95
System 3	115.95
System 3E	145.95
Works Platinum	165.95

DATABASE

Data Retrieve	87.95
Data Retrieve Pro	178.95
DBman V	347.95
Superbase	73.95
Superbase 2	115.95
Superbase Pro	274.95
Superbase Pro 4	564.95

DESKTOP PUBLISH

Outline Fonts	259.95
Pagesetter II	154.95
Pagestream V2.1	334.95
Pagestream fonts	48.95
Pro Page V2.0	394.95
Professional Draw 2	244.95
Publishers Choice	184.95

WORD PROCESS'S

Becker Text	124.95
Cygnus Ed Pro	104.95
Excellence 2	197.95
Gold Disk Type	74.95
Kind Words II	89.95
Pen Pal	167.95
Protext	174.95
Prowrite V3.1	167.95
Prowrite Fonts ea.	49.95
Word Perfect V4.1	499.95

SPREADSHEETS

Advantage	245.95
DG Calc	77.95
Halcalc	72.95
Superplan	99.95

UTILITIES/LANGUAGES

Amx II software only	339.95
Ami Align'mt Kit	64.95
Amiga Vision	167.95
Amos	110.95
Arexx	68.95
Aztec C Prof.	294.95
Benchmark Mod. 2	254.95
Can Do	164.95
Can Do Pro-Pak	48.95
Cross Dos V4.0	48.95
Devpack V2.0	139.95
Directory Opus II	47.95
Disk Labeler	109.95
Disk Mechanic	99.95
Doctor Ami	119.95
Dunlap Utilities	164.95
GFA Basic	184.95
GFA Basic Compiler	74.95
GP Term	53.95
Hi-Soft Basic	104.95
Hi-Soft Extension	69.95
KCS Power Board	104.95
Pelican Press	174.95
Pixel Script	154.95
Quarterback V4.0	169.95
Quarterback Tools	244.95
Sas/Lattice C V5.2	229.95
Sas/Lattice C++	84.95
Syncro Express III	174.95
X-Copy Prof. +hrdw	194.95

TAKE 5% OFF ON ANY SOFTWARE TITLE, SEND MAIL ORDER & SAVE

Ferrari Formula One	36.95
F14 Tomcat	42.95
F15 Strike Eagle	42.95
F16 Combat Pilot	46.95
F18 Hornet	46.95
Fighter Bomber	36.95
Fimbo's Quest	34.95
Ghouls and Ghosts	36.95
Golden Axe	36.95
Greg Norman Golf	46.95
Hammer Fist	36.95
Heroes	36.95
Hillfear	33.95
Hot Rod	34.95
Hunt 4 Red October	36.95
International Soccer	29.95
Italy 1990	36.95
J. Nicklaus Golf	36.95
Kings Bounty	36.95
Klax	36.95
Last Ninja II	34.95
Leonardo	36.95
Might & Magic 2	39.95
Monty Python	36.95
Ninja Remix	36.95
Parzer Battles	36.95
Pirates	46.95
Pro Tennis	36.95
Project Site'ith Fight	46.95

PRODUCTIVITY

Ultima 6	84.95
Ultima Trilogy (1,2&3)	67.95
Ultimate Golf	46.95
U N Squadron	36.95
Wheels of Fire	36.95
Winners Italy 1990	36.95
Word'boy m'ater l'nd	36.95
Action Replay VI	129.95
Award Ware	28.95
Basic - 8 Plus 128	67.95
Basic - 8 Toolkit 128	29.95
Basic Compiler 128	67.95
Blitz 64	36.95
Cobol 64	56.95
Create a Calender	34.95
Data Manager	36.95
Electronic Cash	86.95
Expert Cartridge	139.95
Fast Load Cartridge	46.95
Font Master II 64	76.95
Home Video Prod	62.95
Mini Office	42.95
Music Const. Set	36.95
News Maker 128	56.95
Paperclip III	94.95
Paperclip Publisher	52.95
Pocket Series ea.	66.95
Power Cartridge	56.95
Printmaster Plus	56.95
Print Power	28.95
Print Shop	74.95
Superbase 64/128	56.95
Superscript 64/128	56.95
Swiftcalc	36.95
Video Basic 64	56.95
Word Writer 5	66.95

GEOS

Geos 64 V2.0	54.95
Geos 128 V2.0	64.95
Geocalc 128	45.95
Geochart 64	35.95
Geochart 128	35.95
Geoffile 64	35.95
Geoffile 128	45.95
Geoprogram'r 64/128	35.95
Geopublish 64/128	45.95
Geos Int'lal Fonts	35.95

EDUCATION

Alien Addition	36.95
Animal Kingdom	37.95
Decimal Dungeon	38.95
Demolition Division	38.95
Family Fued	29.95
Fraction Action	37.95
Math Blaster	56.95
Mavis Beacon Typing	46.95
Minus Mission	36.95
Number Farm	36.95
Sim City	56.95
Speed Reader II	46.95
Spell It	66.95
Spelling Wiz	37.95
Wheel of Fortune	29.95
Where in Carmen. ea.	59.95

MAIL ORDER FORM

NAME: _____

ADDRESS: _____

POST CODE: _____

PHONE: () _____ DATE SENT: _____

QTY | PRODUCT/PROGRAM NAME | COMPUTER | DISK TYPE | PRICE

METHOD OF PAYMENT: Please cross

<input type="checkbox"/> BANKCARD	<input type="checkbox"/> MASTERCARD
<input type="checkbox"/> VISA	<input type="checkbox"/> AMERICAN EXPRESS
<input type="checkbox"/> CHEQUE	<input type="checkbox"/> MONEY ORDER

POSTAL \$3.00

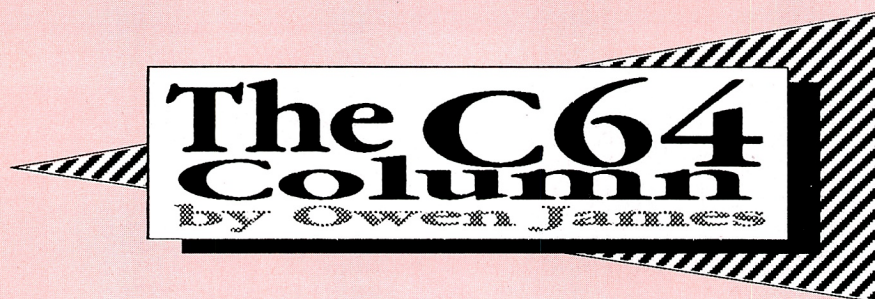
TOTAL \$

CREDIT CARD USERS ONLY:

Credit Card No: _____ Exp. Date ____/____/____

Signature: _____

JUST BECAUSE YOU DON'T SEE IT - DOESN'T MEAN WE DON'T HAVE IT !!



The C64 Column

by Owen James

The C64GS appears to be very much alive. Basically, it's a C64 minus a keyboard and various ports. At the moment it appears to be a 'UK only' product. It has all the same graphic and sound capabilities as the standard C64 (why the 'GS' suffix then?).

Even if the GS doesn't make it to our shores, it still spells good news for game freaks. We should see renewed activity in the game market, which has appeared to go a bit stale of recent times. Watch out for better quality games because using the cartridge medium, software houses can squeeze up to around 512k for each game. And no wait for loading times! Ocean Software is already heavily committed to cartridge-based releases, with *Robocop 2*, *Shadow of the Beast* and many more already available. The cartridges aren't designed exclusively for the GS either. They'll function more than happily on a standard C64.

Will the C64 console be able to compete with Sega and Nintendo? All three are in the same price bracket, but the GS might have the leading edge because of cheaper cartridges. Perhaps we're in for a price cutting war? We'll just have to wait and see.

More peripherals

There certainly isn't a shortage of cartridges and other 'add-ons' for the C64. There are so many, in fact, that it's easy to become confused with what each is supposed to do. This month is a general guide to peripherals for the power-hungry 64 user.

Before we begin, a few terms you should be familiar with:

Freeze: Suspends a program at the point the freeze is activated.

From here the program may be saved, altered or restarted.

ML Monitor: Used to interpret memory as machine language mnemon-

ics. Useful for debugging software and otherwise making changes. Can often be used in conjunction with the freeze option to make changes without corrupting memory etc.

Sprite Collision Disabler: A game cheat option which, for example, ignores a collision between you and enemy fire.

Screen Snapshot: Takes a 'snapshot' of the current screen, usually allowing you to make a hardcopy, save to disk, or make changes to it. Have a copy-right guidebook on hand with this one!

Disk Turbo: Increases the speed of disk operations.

And now for a look at cartridges:

Action Replay

Possibly the favourite for game users, the Action Replay provides many useful utilities for the budding hacker. Included is a freeze utility, ML monitor, disk turbo and many more. One of AR's nicest features is that it allows you to enter BASIC POKEs while the program is in a frozen state. Once your POKEs are all in, just restart the program. As I'm sure any 'POKE hunter' will tell you, the hardest part of finding cheats for a game is actually finding a restart address.

The latest incarnations of Action Replay also allow for some extended BASIC commands. While the list of new commands is far from exhaustive, I think the cartridge was designed more for the inquisitive game player than the dedicated programmer. Because of its gaming appeal, Action Replay is one of the most popular cartridges available for the C64

Final Cartridge III

Apart from the irony of there being three 'final' cartridges, FCIII wins in the cosmetic department. It uses a GUI (graphic user interface) that will have

you pointing and clicking the same as you would in GEOS. When you power-on, FCIII automatically recognises if you are using a mouse or joystick and even which port you're using without you ever having to select the preferences option. Overall, it looks and feels solid.

Like the Action Replay, FCIII has a freeze utility, an ML monitor (including sprite and character editor) and, of course, a sprite collision disabler.

What I don't like about FCIII is that the freeze option is often far from reliable. On some occasions it refuses to even attempt to save, and on others you think the save was successful but on reloading you realise it wasn't. Also, it's a shame that you haven't the option of restarting the program from a frozen state after a save instead of being dumped back on the desktop. Perhaps a little bit more thought is needed in this department. It certainly isn't strong in the disk utilities department, either. It lets you scratch and rename files, but a single file and complete disk copier would've been nice to make this a genuine final cartridge.

BASIC programming is where this cartridge really excels. It provides a total of almost 30 new commands for BASIC programmers. Note, however, that it is not an extended BASIC in the sense that the new commands can be made an integral part of your program. Instead they are designed to be utilities to aid the programmer.

Final Cartridge III gives you commands such as RENAME, APPEND, ARRAY (dump), AUTO (line number), FIND, TRACE, RENUM, PACK, etc. The manual might leave a lot to be desired, but on the whole Final Cartridge III provides an excellent environment for either programming or general C64 activities.

Super Snapshot 4

Super Snapshot is similar in design to Final Cartridge and Action Replay, although lacking some of the features such as a character editor and joystick autofire and joystick swap.

SS4 provides the usual DOS wedge and copying utilities, as well as a BASIC toolkit extension. Unfortunately the extra BASIC commands all need to be loaded from disk before being used (like the KA43/5 Open System). Not exactly what

you would expect from a cartridge utility. It provides a fairly solid machine code monitor.

Warp Speed

Warp Speed isn't really in the league of the above three, but then again it doesn't pretend to be. WS is designed to be nothing more than a powerful DOS utility, and I might add that in the DOS handling department it beats the above three hands down.

Warp Speed lets you take charge of your drive using menus. From these you can scratch, delete, view and even copy files with the utmost of ease. Warp Speed also has a complete disk copier for one or two drives, and a very fast disk turbo. Some of the more powerful features are a track and sector editor, a machine language monitor, text screen printer dumps and a native 128 mode. WS also has a reset button and an 'old' command for the return of BASIC programs.

Recommended if you want easy DOS access without the bells and whistles of the more expensive cartridges.

Turbo Master CPU

If it's speed you're after, then look no further than the Turbo Master. Increases the speed of just about every aspect of the C64 by a factor of four. Also includes a DOS wedge and a machine language monitor can be found on the utility disk. See the review in the February ACAR for more information.

RAMlink & RAMdrive

These two are only new on the market. RAMLink is a RAM expansion unit interface designed to let you get the most out of your existing REU. RAMDrive is an actual REU with a maximum capacity of 2 megabytes. As yet I haven't seen them first hand, so I won't say too much other than the information circulating makes them sounds great.

Quick Brown Box

The QBB is kind of like a cross between a cartridge and a disk drive. It's a storage device that uses battery-backed RAM. Like a cartridge, whatever is stored on QBB is ready and waiting as soon as you power-on.

QBB comes in two versions - a 64K model, and a 32K model. Using the supplied software you can transfer your programs to the Quick Brown Box in much the same way you would if using a disk drive. If you're hoping to put something like GEOS on the QBB then you must first get an unprotected version. I'm told this is simple enough if you use either Maverick or Vorpai Aid.

Once again, I can't say much about QBB's performance because I've yet to use one first hand. They seem to be pretty scarce in Australia, but the good folk at Briwall say they can get you anything that Briwall U.S. carries, so if you're after one of these it may be worth giving them a call on (06) 288 0131.

\$10 Service Offer

**Don't wait till it's too late!
Protect your Commodore or
Amiga computer, monitor, drive
and printer now and don't pay
any repair fees for a full year**

GAINRUN

PTY LTD

ACN 010 992 800
7/27 Justin St
SMITHFIELD 2164
(02) 757 1055

PARCOM

PTY LTD

ACN 010 631 660
Samuel St
CAMP HILL 4152
(07) 395 2211

Authorised Commodore Service Centres

- * Send \$10 per unit
- * Abuse and misuse excepted
- * Next day service
- * Spare parts extra
- * BC/MC/Visa/Cheque

MODEL	SERIAL NO
.....
.....
.....
.....
CURRENTLY IN WORKING ORDER	
SIGNATURE.....	

POPULAR MODULE EXCHANGE SERVICE

PARCOM Pty Ltd

Whites Hill Shopping
Village
Samuel St
Camp Hill, Qld 4152
(07) 395 2211

GAINRUN Pty Ltd

7/27 Justin St
Smithfield
NSW 2164
(02) 757 1055

Send your PCB, PSU, Drive or Mouse for next day replacement.

Reconditioned Modules available for most models e.g.

C64, 64C, 1541II PCB	\$99.00
A500 PCB	\$129.00
AMIGA DRIVE	\$200.00
MOUSE	\$50.00
A500 PSU	\$75.00

**ALL ITEMS MUST BE COMPLETE
AND IN SERVICEABLE CONDITION**

**THREE MONTHS WARRANTY
ON ALL MODULES
PLEASE CALL FOR FURTHER
DETAILS**

Letters

This first letter out of the mailbag this month comes from Eric Ireland of Beecroft NSW.

"Dear Owen, I have a C64 and have been reading ACAR for the past couple of years. I think you have a great magazine, although it would be better if you had a few more C64 games reviews. I use my C64 mostly for playing games and typing out school projects, although I am also interested in computer programming, and have written a few programs in BASIC.

"I would like to learn machine language, but I do not know which assembler I should buy, which computer shop I should buy it from, or what book I should buy to teach me. I already have *Supermon*, by Jim Butterfield, but it does not allow line numbering or labels or any other common features that most other assemblers have. I also have the Commodore 64 Programmer's Reference Guide, but it is not very helpful to the beginner. If you tell me what to buy and where to buy it from it would be very helpful.

"I have another question to ask. Recently I was looking through the memory maps in the C64 Programmer's Reference Guide and in location 53270, bit 5, it says "ALWAYS SET THIS BIT TO 0!". Just out of interest I set it to 1, (by poking 53270,255 which sets all bits to 1) and I got a weird character set. Do you know why?"

If you're going to start machine language, you may as well start on the cheap. There are a number of public domain assem-

blers floating around. Check with Allan Crouch (649 4904). He might have just what you're looking for. One I can recommend is *Turbo Assembler V4.1*. As for books, start with something for beginners. *The Beginner's Programming Handbook*, published by Usborne, is an excellent book for starting out. It may seem a little bit immature having little cartoon robots popping up on every page, but when it comes to clarity and step-by-step guides I have yet to find a book that is better. You already have the Programmer's Reference Guide which is a great resource irrespective of your level of programming ability. Another book which I find indispensable is the *6502 Reference Guide* by Alan Tully (published by Melbourne House Publishers). It gives a complete list of 6502 instructions and their descriptions, hex and decimal equivalents, along with bytes and timing information. Just the thing for finding that forgotten instruction or debugging.

Bit five of 53270 won't do anything harmful to the C64. As you've probably already guessed, it's a control register for the VIC-II chip. Bit five in particular is, or was, used to enable or disable the display. On the newer C64s this has little or no effect. By poking 255 to 53270 you've turned more than just bit five on. You've probably noticed the display has shifted off centre and any characters on screen have become a multicolour mess. POKE 53270,200 will put things right, or just press RUN/STOP-RESTORE.

Mr. W. Reed of Salisbury Park writes to ask what an EPROM is. An EPROM is Erasable Programmable Read Only Memory. Think of it as a storage device. Unlike a disk, however, you don't have a long wait for disk-to-memory transfer. You must use an EPROM burner to store information, and ultra-violet light to erase it. EPROMs can be used in place of standard ROM chips. You could make changes to the C64's operating system, as detailed in The C64 Column over the last two months, write the revised code to EPROM, and replace the C64's internal ROMs for a truly customized system.

EPROM programmers for the C64 are not easily available in Australia. Datel Electronics advertise in many of the UK magazines and offer everything you need to start EPROM programming. Their kit costs around forty pounds.

Short Program Competition

A reminder about our short program competition. Australian C64 software developers Millersoft (5 Argo Way, Airds, NSW 2560) has offered three of its packages valued at approximately \$90.00, and I'll also be making available several compilation disks of the best C64 PD software around. To enter, simply send in your original short and useful programs for the C64. Here's the guidelines:

1. Programs must be short. About four or five disk blocks long is the limit.
2. It must serve some useful purpose.
3. Programs can be submitted on disk, tape, or printed listing, though disks are preferred.
4. Entries must be received by August 31st 1991.

Those people who have sent in original programs for various reasons over the past months will be included if they're eligible. □

DON'T

**trade in your old mouse or
buy one with microswitches**

Fix your own at home with the
MOUSEBOARD.

If you're having trouble with your
Amiga Mouse firing this is the
board for you. A small PCB
fitted with **microswitches**.

You will now fire every time, all
the time.

Easy to instal and economical

Only \$12.95

Cheque/Money Order to:

NORTECH COMPUTING
PO Box 210 MOONTA SA 5558
Phone & Fax 088 252 538
Includes Post and Packaging
Dealer enquiries welcome

AMIGA PUBLIC DOMAIN SOFTWARE

- Free delivery ● 1,000's of programs
- All orders despatched next day

One of the most comprehensive ranges of Amiga PD software.

* FISH DISKS
* AMICUS DISKS
* AMIGAN DISKS
* ALPHA DISKS
* T-BAG DISKS
* TOPIK DISKS
* F.A.U.G. DISKS
All \$4.00 each
LATENIGHTER DISKS
\$5.00 each

Best of Public Domain
Over 530 of the very best from only \$2.95 per disk.

INTRODUCTORY PACK

comprising

PUBLIC DOMAIN CATALOGUE

1,000's of program listings

SAMPLE DISK

10 great games/programs

HINTS AND TIPS DISK

1.5 Megabytes of hints & tips

TUTORIAL DISK

Amiga Tutor and DOS Helper

GAMES DISK

7 fantastic games

UTILITY DISK

5 incredible utilities

Total Value \$36

Introductory Price\$19.95

- ☐ For only \$5 we will send our Catalogue Disk with a free game and virus checker PLUS a sample disk of 10 great Games/Programs.
- ☐ OR try our INTRODUCTORY PACK for only \$19.95. PLEASE TICK.

LEEJAN ENTERPRISES

PO Box 66 Happy Valley SA 5159 Tel (08) 322 3392

BANKCARD/MASTERCARD/CHEQUE/MONEY ORDER

BCARD/MCARD NOEXP.....

NAME.....SIGNATURE.....

ADDRESS.....PCODE.....

Quadrant COMPUTERS, PERTH

AMIGA ACCESSORIES

4Way Joystick Adaptor \$22
ACTION REPLAY MARK II \$170
Agiler Mouse \$59 Genius Mouse \$45
AMAS ADV MIDI & Sampler \$210
BODEGA BAY \$5CALLS
DIGI-VIEW GOLD V4.0 \$269
Dr. Ts MOEL A MIDI INT \$135
FRAMEGRABBER (PAL) \$1199
KCS POWER PG BOARD \$515
RADICAL MIDI INT \$72
SUPERCARD AMI II \$139
VIDEO BLENDER \$2250

GVP SERIES II HARD DISK

GVP A500 42MG +8MB OK \$960
GVP A500 54MG +8MB OK \$1169
GVP A500 100MG +8MB OK \$1455
GVP A2000 52MG +8MB OK \$1130
GVP A2000 80MG +8MB OK \$1189
GVP A2000 105MG +8MB OK \$1399
GVP A2000 170MG +8MB OK \$1899
DATA FLYER A2000 HD 40 MG \$885
DATA FLYER A2000 HD 80 MB \$1095
DATA FLYER A2000 HD 100 MB \$1195
4Mb BASEBOARD 1Mb Pop \$310
4Mb BASEBOARD 2Mb Pop \$399
4Mb BASEBOARD 3Mb Pop \$489
4Mb BASEBOARD 4Mb Pop \$585
3.5" EXT DISK DRIVE \$135
512K RAM EXP CLOCK & Switch \$79
3.5" NASHUA DISKETTES \$15

AMIGA PD AMIGA PD

FISH 1-510 AMAS CCCC TOPIK
AMIGAN AMICUS FAUG NZ AMIGA
AMIGOZ PHOENIX \$2.50 COMPASS
MACRO AMUSE SNAG SMAUG
\$2.00 including Nashua diskette
17 BIT COLLECTION \$3.00

2 DISK PUBLIC DOMAIN CATALOGUE \$4 Includes Postage

PUBLIC DOMAIN POSTAGE:
1-9 DISKS \$2.00 10-20 DISKS \$3.00
20-30 DISKS \$5.00

AMIGA SOFTWARE

3-D CONSTRUCTION KIT \$129
AMIGA VISION \$180
AMOS The Creator \$120
ANIMATION STUDIO Disney \$229
BARS AND PIPES \$269
CAN DO \$160
CAN DO PRO PACK \$49
CAN DO INTRO PACK \$49
CROSS DOS V.4 \$60
CYGNUS ED V2.0 \$135
DISKMASTER V1.4 \$55
DBMAN V \$359
DOS 2 DOS \$59
DR TS COPYIST APP \$135
DR TS TIGER CLUB \$110
DR TS LEVEL II V3.0 \$369
EASYLEDDERS ACCOUNTING \$370
EXCELLENCE V2.0 \$219
KATIES FARM or MCGEE \$55
LATTICE 'C' DEV SYSTEM \$399
MAC 2 DOS INC INTERFACE \$175
MAXIPLAN PLUS \$89
MUSIC X JUNIOR \$185
ORGANIZE (SPECIAL) \$55
PAGESTREAM V2.1 \$349
PAGESTREAM FORMS VII 1 \$52
PAGESTREAM FONTS 1-16 EA \$50
PAGESTREAM FONT PACK PLUS \$89
PAGESTREAM FONT PACK \$89
PROFESSIONAL PAGE V2 \$399
PROJECT D V2.0 \$79
PROWRITE V3.1 \$179
QUARTERBACK HD UTILITY \$179
QUARTERBACK TOOLS \$89
QUICKWRITE \$87
SUPERBASE PRO V4.0 \$595
WORKS PLATINUM \$169
X COPY PROFESSIONAL \$119
YOUR FAMILY TREE V2.0 \$109
ZUMA FONTS EACH \$35
ZUMA FONTS SETS EACH \$59

POSTAGE CHARGES

Australia Wide Courier
AIR FREIGHT
3KGS FOR \$6.00
CALL FOR SURFACE RATES

COMMODORE 64/128

ANIMATION STATION \$125
GEOPRINT CABLE \$62
FREEZE MACHINE \$55
KCS POWER CARTRIDGE \$49
SLIMLINE CONVERTER CASING \$15
TURBO LOAS CARTRIDGE \$37
XETEC SUPER GRAPHICS JNR \$110
XETEC SUPER GRAPHICS \$159
XETEC SUPER GRAPHICS GOLD \$279
VSI IBM TO 64 ADAPTOR \$75
GEOS V2.0 64 \$54
GEOS V2.0 128 \$64
GEOCALC 128 \$45
GEOCHART 64/128 \$36
GEOFILE 64 \$36
GEOFILE 128 \$46
GEOPROGRAMMER 64/128 \$36
GEOPUBLISH 64/128 \$46
GEOS INT FONT PK 64/128 \$36
AWARD MAKER PLUS \$36
BILLBOARD MAKER \$40
ELECTRONIC CASHBOOK \$84
FAMILY TREE V2.0 (64) \$74
FLEET FILER \$36
FLEET SYSTEM 2+ \$56
FLEET SYSTEM 4 128 \$74
MINI OFFICE II \$46
PRINTMASTER PLUS \$55
PRINTSHOP \$64
SUPERBASE 64 OR 128 \$55
SUPER C 64 OR 128 \$85
SUPER PASCAL 64 OR 129 \$84
SUPERSCRIPIT 64 OR 128 \$55
SWIFTALC Inc Sideways \$30

**NEW EXTENSIVE
PRODUCT CATALOGUE
AMIGA \$3.00
C64/128 \$2.00
INCLUDES POSTAGE**

PRICES AND SPECIFICATION SUBJECT
TO CHANGE WITHOUT NOTICE

26 Rochester Way Dianella
P.O. Box 380 Morley WA 6062
Pager (016) 983 333
Facsimile (09) 375 1113
Phone (09) 375 1933
Mobile 018 918 608

Trading hours West Coast
8am-6pm Mon-Fri
8am-9pm Thur
8am-3pm Sat
Trading hours East Coast
10am-8pm Mon-Fri
10am-11pm Thurs
10am-7pm Sat

**C.O.D. CASH
CHEQUE
MONEY ORDER**
Credit Cards - Call
Surcharge May Apply
MAIL ORDER WELCOME

Best Products... Best Prices

GVP Series II A2000

Prices Slashed!

40Mb Quantum \$899

52Mb Quantum \$999

105Mb Quantum \$1199

210 Mb Quantum \$1899

Series II A500

42Mb Fujitsu \$999

52Mb Quantum \$1249

105Mb Quantum \$1690

All have space for 8Mb @ \$200/2Mb

NEW FLICKER FIXER

Commodore A2320 Image Enhancer
Supports Workbench 2.0 for A2000

\$449 (limited stocks)

NEC 3D to suit \$999

GVP ACCELERATOR \$Call

NEW & USED AMIGAS

BOUGHT & SOLD

Sigmacom

(02) 545 3383

(018) 257 471

TurboText

Veteran text editor user Tim Strachan has been a long time proponent of the text editing world. There are still rumours he has never used a wordprocessor - nevertheless, here he is, exceedingly more qualified than most to write about the latest addition to the fray.

I have always used text editors exclusively (rather than word processors) for editing *Megadisc*, as well as all the other writing I do. I began with *Ed* (Commodore's own troglodyte of an editor, spiffed up in WB2), moved on to *TxE*d 1.0 to 1.2 to 2.0 etc, and along the way also bought and used PTE (*Professional Text Engine*) and *Cygnus Ed* from AS-DG.

PTE is the most powerful by far of all those mentioned above, and many of its powerful features have been imitated by *TurboText* (TT from now on), particularly the availability of a built-in programming language, which therefore allows the creation of emulations of other text editors right down to the duplication of the menus. This also means that you can keep adjusting your definition file, by simply using those definitions in other files which suit you. It just happens that doing all this with TT is a lot more straightforward than with PTE.

Packaging and manual

Very neat, the typical cardboard box setup. The manual is plastic ring-bound, but the type seems to be rather fuzzy in parts. The manual is well organised and generally well-written, and there are numerous useful Appendices at the back, such as Error Messages (Dos, ARexx, Definition file, and Turbotext errors), a Command Reference for the built-in programming language, about TT under WB2, a Glossary and a pretty reasonable Index.

Emulation

One of the most powerful features of TT is its ability to emulate the commands and menus of other programs by simply loading in a new definition file, of which there are numerous supplied with the program, such as for *TxE*d, *Cygnus Ed*, *Wordstar*, and so on, as well as definitions devised to make program-

ming source code easier. It is interesting to note that while some emulations are pretty complete there are some gaps. For example, in the *TxE*d emulation, there is no "Strip, etc." option available, and this was quite useful for stripping line-feeds; there is no apparent equivalent in TT, it seems. Likewise there are improvements - the old "Print Clip" in *TxE*d brought up a requestor; now, the clip is sent straight to the printer.

Icon magic

TT is distinguished by a clever use of icons. Tool Types entered into the icon info screen are many, various and powerful. TT's icon tool types can be overridden by special tool types in particular project icons, meaning that you can have a bunch of different setups associated with different project icons, double-click them and you've got a new setup.

Likewise, there are all sorts of combinations which allow you to simply load it into memory to be activated by a hotkey; to unload itself from memory when all screens are closed; to start up with an automatic ARexx macro; to open with a custom or Public or Workbench screen; and more. Of course, all of these capabilities are available from the CLI too.

One very amazing trick with icons, in WB2 only, is that you can drag the icon for a project (text) file onto TT's open window and presto! up comes that file ready for editing. This is the first use of WB2's "AppWindow" feature that I've seen.

Other features

Public screen capability - you can pop TT up on its own public screen, meaning that other windows can be popped up onto it.

Fonts - the full selection is available via requestors.

Version - TT is supposed to be able to store and retrieve "version" informa-

tion with all files produced with it, and it should be accessible by using the AmigaDos Version command, although I didn't find anything happening when I played with it.

TTX in WBStartup drawer - this is a good way to get it going: TTX is a small version of TT which loads it into memory according to the many tool types in the icon, mentioned above.

TT has a good requestor, the nearest I've seen being *Cygnus Ed*'s rather baroque one. This one doesn't show all Assigns and Devices, but gives a large space for listings, and allows for the selection of pattern matching - ie, if you only want to see files ending in ".doc" you can enter "#?.doc" in the pattern matching gadget. Useful, but you have to remember it's on at times, or you'll think a particular directory doesn't hold the file you thought it did. Another neat feature of the requestor is the existence of a little trashcan icon under the slider bar - means you can use the requestor for getting rid of unnecessary stuff.

The full screen is available for editing, ie, unlike some editors which require you to space along to places beyond the text on a line. The cursor changes into different little graphics while performing particular tasks. The next version will have an ARexx interface to *AmigaTeX*, the amazing typesetting program.

Dragging with the mouse say at the bottom of the page scrolls the screen down, but an innovation is to have the scrolling sped up by moving the mouse to the left of the screen, and to slow it down increasingly by moving towards the right side. Three-button Mouses are supported, and you can set up a few extra tricks with them.

Anyone using ARexx often will start to be driven to distraction that there can only be one assigned REXX: directory, because it begins to get quite full... The use of ARexx with TT has obviously been well thought out. TT will still work fine as a text editor without ARexx, but you get a large number of new capabilities, and the chance to make up your own if you get really involved. Some of those included are:

- Save Block
- Print Block
- Sort Block
- Print Lines, etc. There are about 45

Creating Batch Files

by Tim Strachan

In your normal use of DOS, you will enter a command and execute it immediately. This is fine for most uses, but occasionally you'll find that you need to repeat a series of commands regularly, or that you'd like to customise the startup-sequence of your Workbench disk. In fact, the startup-sequence is the most significant of CSFs, and being able to manipulate and change it is one of the fundamental abilities you should develop.

In this tutorial you'll learn how to do so, and all the necessary tools are available on your Workbench disk. You will need to know the basic structure of CSFs, and how to edit them. There are some special CSF commands, such as EXECUTE, SKIP, and so forth, which are used in conjunction with normal CLI commands, and there is a TEXT EDITOR, called ED in your C directory which allows you to create or change such files, as well as any other text file. However, you can create a text file of any kind with any Word Processor which allows you to save a file in strict text form (as ASCII characters).

Fundamentals

1. Using ED - The text editor

As mentioned above, you will have to be able to create a text file with a text editor, and your Workbench disk comes with ED, a basic text editor quite capable of this and more. There is another "Line Editor" called EDIT in your C directory as well, but it is not easy to learn. In fact, it would be worthwhile buying a commercial editor such as *TurboText*, or finding one of the excellent editors in the public domain, which make use of the Workbench interface. In the meantime however, if you wish to create a new file, or edit an old one, using ED, simply enter in the CLI ED FILENAME, for example ED df0:s/startup-sequence if you want to change your startup-sequence (do it with a COPY of your Workbench!). Now just enter text from the keyboard to create a new file.

In the case of editing an existing file, use the cursor keys, DEL and BACKSPACE and RETURN keys to

change and add text. Let's say that we want to create a file called MAKERAM which will copy all the CLI commands into RAM, and run them from there instead of from your disk (see further below). Enter the following:

```
ED SYS:S/MAKERAM ;(You'll be presented with the ED screen.)
MAKEDIR RAM:C (Hit return)
COPY SYS:C RAM:C (Hit return)
ASSIGN C: RAM:C (Hit return)
```

You now have a 3-line batch file. If you notice a spelling mistake, simply use the cursor keys to reach the mistake and Backspace or Delete the offending letter(s).

Now you must save the file, so press ESC and you'll find the cursor drops to the bottom of the screen where further commands (called EXTENDED COMMANDS as distinct from IMMEDIATE COMMANDS which you use when on the ED screen itself) may be entered. The command to save is simply X, followed by RETURN. This will exit ED, while saving your file under the name you first gave it in the directory you specified - in this case MAKERAM in the S directory.

NB - The REFERENCE SECTION of your Amiga Manual lists all the available commands for ED, and if you decide to stay with ED, make sure you experiment with them, as they allow you many powerful possibilities for text editing.

Creating a command sequence file you must create a file with one or more CLI commands, with one command to a line, and with a RETURN character at the end of each line. Having created the file, it is a good idea to save it to the S directory of your disk, since AmigaDOS looks there automatically when you use the command EXECUTE. This means that you don't have to type out the full PATHNAME of the file - ie, where it is, such as:

```
df1:utilities/myCSF
Instead, you'll simply type
EXECUTE myCSF
```

The command EXECUTE (which is detailed below) must precede any CSF, just as it is automatically used when booting up with any Workbench disk. You can also attach comments to your CSF by simply typing in a semi-colon before any comment you make. For example:

```
MAKEDIR RAM:C;make directory c on the Ram disk
```

```
COPY SYS:C RAM:C ALL;copy all your c commands across
```

```
ASSIGN C: RAM:C;re-assign your c: directory to ram:c
```

This CSF is a most useful one to have, since it allows you to copy all your CLI commands to a C directory which you've created on your Ram disk, and then, the last line tells the system to look in the Ram:c directory when it wants to find a CLI command. These three lines could be typed into your startup-sequence to be executed automatically each time that you boot up; or you could simply name this file MAKERAM or some such name, and EXECUTE it whenever you want to.

Such a file can be refined as you wish - it may be that you are memory-conscious, and don't want to have a lot of your precious Ram taken up by commands that you rarely use. So you could adapt this CSF to copy only those commands that you use regularly into the RAM:C directory, by replacing the second line above by the following series:

```
COPY SYS:C/CD RAM:C
COPY SYS:C/DIR RAM:C
COPY SYS:C/TYPE RAM:C
COPY SYS:C/COPY RAM:C
```

You could add to this series according to which commands you'd normally use. Now such a file requires the COPY command to be read from your disk each time, so we could add a further refinement by copying the COPY command directly to RAM:C first, and then ASSIGNing a short alias to it (ie, you give it a shorter name for convenience), to speed up the processes of both executing the command and of typing it in, as follows:

```
MAKEDIR RAM:C
COPY SYS:C/COPY RAM:C
ASSIGN CP: RAM:C/COPY
```

Continued on p58

COLOUR RIBBONS

Can't afford a colour printer?

You can still produce text and graphics in colour using ribbons from Australia's widest range of specialty printer ribbons.

Available in Red, Green and Blue for most printers - Brown Purple & Yellow also available for some types.

SAMPLE PRICES

Commodore MPS 801	\$13.50
Commodore MPS 803	\$14.30
Citizen 120D	\$16.25
Epson LX400/MX80	\$16.90
Epson LX80	\$12.25
Epson LQ400/500	\$18.20
Oki 170/180/190	\$16.80
Panasonic 1080/1090	\$17.50
Panasonic 1124	\$24.50
RitemanC+/F+	\$20.80
Star NX1000	\$12.25
Star NX/XB2400	\$20.15

Lazarus Ribbons

70 Wolseley Rd Tel: (02) 960 2737
Mosman (008) 24 9991
NSW 2088 Fax: (02) 968 1276

C64 SOFTWARE

EXTENSIVE RANGE OF PUBLIC DOMAIN SOFTWARE FROM UK, USA, AUSTRALIA.

EACH DISK CONTAINS MANY EXCITING PROGRAMS FOR ONLY \$5 PER DISK.

● SPECIAL ●

INTRODUCTORY OFFER

5 DISKS - \$20

+ FREE CATALOGUE DISK

● GAMES ● GRAPHICS

● UTILITIES

● TUTORIALS

IMMEDIATE DELIVERY

PLEASE SEND 5 DISK OFFER
\$20 CHQ/M.O. ENCLOSED

Please tick your preference(s):

____ Games ____ Computing
____ Art ____ General

PLEASE SEND FREE
CATALOGUE

Name: _____

Address: _____

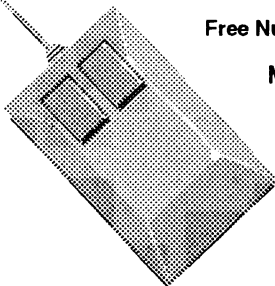
PostCode: _____

Post To: BRUNSWICK PUBLICATIONS
PO BOX 458
- BOND JUNCTION NSW 2022

MEGADISC

... when you're thru playing games

Free Number for Contributors & ORDERS : 008 22 7418



Megadisc was designed to help you really learn how to use your Amiga. Tutorials, articles, reviews, hints and tips, useful software, and much more are included to help both the beginner and the veteran to use the Amiga more productively.

Not too serious and not too lightweight, Megadisc entertains you while you learn. Available as single issues, subscriptions of any three or six issues (past or future), or as a Trial Pack (including Megadisc, our Amiga Manual-on-Disk and Megadisc 21, and our Catalogue-on-Disk). If you get a Trial Pack, you can subscribe later for the lower rate mentioned below. Megadisc subscribers get lower prices on all our products, including the largest collection of quality public domain disks (almost-free software), now \$3 each to current subscribers. Every Megadisc has the latest Virus-Killer update, and each Megadisc contains as much material as three of four conventional magazines, plus material available only on disk. Don't accept imitations or PD re-hashes.

• • • • • MEGADISC 23 AVAILABLE • • • • •

The Entire Megadisc Series

- Order Megadisc 1 ~ 22 and a Catalogue-disk for \$199!
That's 23 information packed disks with ALL available Amiga info!
- AmigaDos Manual-on-Disk, with all you need to know about CLI, Workbench 1.2, 1.3 and ARP described in layman's terms for \$19.95. Price for current subscribers \$13.95
- Trial Pack - Megadisc 22, Megados, and Catalogue-Disk for \$29.
Past and current subscribers ~ RE-Subscribe for less!
\$45 instead of \$50 for a 3-Issue subscription (2 free PD incl.)
\$80 instead of \$90 for a 6-Issue subscription (4 free PD incl.)

The BEST Public Domain Disks

- Don't miss this terrific, and cheap, resource! Disks cost \$4.50 each ~ \$3 for Subscribers. All our Disks are fully described on our FREE Catalogue-Disk.
Buy 10 PD disks, get one free ~ ie 11 PD disks for \$30 or \$45! Games 10-Disk-Pack & PD 10-Pack for \$45 each. Our PD collection of 1700 disks contains databases, word-processors, spreadsheets, demos, graphics, tutorials, animations, utilities and more!
All disks are virus-free, and many are unavailable anywhere else.
- ALL-NEW EDUCATION PD 10-PACK - 10 disks full of Educational software \$45!

Send to: MEGADISC, PO Box 759, Crows Nest

Telephone: (02) 959 3692 (all hours) Fax: (02) 959 3525

Contributions to Megadisc of any kind are most welcome ~ please call

We do not charge for Postage and Packaging, and there are no hidden extras in our prices

We also take BankCard, MasterCard and Visa Orders by Phone of Fax.

I enclose a Cheque/Money Order for _____ or please charge my Creditcard:

MasterCard/BankCard/Visa No: _____ Exp: _____

Please send me: • Catalogue-on-Disk AT NO COST: ☐ • Trial Pack \$29 ☐ • ANY 6 Issues of Megadisc for \$90 ☐ (please specify) _____ (\$80 for re-subscribers)

• ANY 3 Issues of Megadisc for \$50 ☐ (please specify) _____ (\$45 for re-subscribers) • Megadisc 1 ~ 22 and Catalogue for \$199 ☐ • The 4 free PD disks I want (2 in the case of a 3-Issue sub) are: _____ OR please send

your Catalogue-on-Disk now and I will choose the remaining disks later: ☐ • 10-Disk Game Pack for \$45 ☐ • PD Education 10-Pack for \$45 ☐ • Megados AmigaDos Manual-on-Disk for

\$19.95 ☐ • For current subscribers \$13.95 ☐ • Other Orders: attach.

Signature _____ Occupation _____

Name _____

Address _____

Telephone _____ Date _____

Students & Pensioners: Send proof of your status (photocopied bus pass, etc.) with any order, and get 10% off the cost!


```
CP: SYS:C/CD RAM:C
CP: SYS:C/DIR RAM:C
CP: SYS:C/TYPE RAM:C
ASSIGN C: RAM:C
```

A further refinement now could be to insert the line CD SYS:C after the first line above - this would make it unnecessary to type in the "SYS:C" before each command to be copied, since you'd already be in the directory that you're copying from.

Removing a ram disk's contents

It may be that you've got to do some memory-intensive work, such as animations, and want to use all the memory you've got. You'll want to remove all those commands on the RAM disk, so you may make up a CSF like the following (and keep it in your S directory as usual):

```
ECHO "CLEARING THE RAM DISK"
CD DF0:
ASSIGN C: SYS:C
DELETE RAM:C
ECHO "ALL DONE NOW"
```

Here's another approach to achieving the same objective, except that this time, some more use has been made of the ASSIGN and ECHO commands. Note that you could also use the SAY command, so that you're told what's happening as it happens.

```
COPY DF0:C/ECHO TO RAM:C
COPY DF0:C/COPY TO RAM:C
COPY DF0:C/ASSIGN TO RAM:C
ASSIGN C: RAM:C
ECHO "MAKING A RAM DISC"
ECHO ""
ECHO "COPYING SYS:C TO RAM"
COPY SYS:C RAM:C ALL QUIET
ECHO ""
ECHO "ASSIGNED C: TO RAM:C"
ECHO ""
ECHO "ALL DONE NOW"
```

In other words, it is up to you and what you want to achieve, and the best way of getting what you want is to experiment.

Further capabilities of batch files

Although any CLI command can be used in a command file (including the

command EXECUTE itself), certain commands were made especially for use in a command file:

IF these allow you to test conditions occurring during execution ELSE of the sequence, and to act on the results.

FAILAT - sets the level of failure at which the sequence will stop.

QUIT - QUIT will force a stop with a return code you choose.

SKIP - allows you to mark areas (LAB) in your sequence and then jump

LAB - forward to them (SKIP).

WAIT - stops sequence processing for a period of time, or until a specified time of day.

ECHO - lets you display text strings, such as prompts, from within your sequence.

ASK - lets you branch either of two ways with a Y(ES) or N(O)

Passing instructions to batch files

The EXECUTE Command itself recognises various DIRECTIVES, which allow you to pass words and substitute them in the various command lines in the CSF. Thus you can use one CSF for a variety of tasks if you design your CSF well. A "dot command" MUST be on the first line of the file. It can be any command, but is usually either a parameter template (.KEY) or a comment.

.KEY or .K This defines the names of the parameters to be passed.

This is the most important of the dot commands.

If this is placed at the beginning of your CSF, then your CSF will take whatever file follows your CSF name and substitute it wherever it sees "filename1" in the batch file.

EXAMPLE: .KEY filename1

COPY <filename1> TO :MYDOCS

To use this CSF (whose name is BACKUP, say), enter

EXECUTE BACKUP Letter

Now the file LETTER is copied to the MYDOCS directory on the current disk.

.DEF <name> <value> defines a global default parameter value (the \$ default is used on that line only)

EXAMPLE: .DEF filename1 #?.doc

If this were inserted in the above example, then if no specific filename were given, then #?.doc would be substituted for the filename, and all files of that pat-

tern would be copied to the :MYDOCS directory.

This gives you a failsafe option, since otherwise all files in the current directory would be acted upon.

.DOT <char> - redefines the command indicator character (default is dot '.')

EXAMPLE: .DOT @ then use @KEY from,to

.BRA <char> redefines the left & right parameter indicators

.KET <char> (default are '<' and '>')

This can be useful if you want to include a name which has the current default bracket characters (ie, < & >)

EXAMPLE: .BRA [

This will change the left angle bracket character (<) to the left square bracket character. Note the period after [

.DOLLAR <char> redefines the default indicator character (default is dollar '\$')

EXAMPLE: ED <file\$work.doc>

This substitutes "file", but if "file" is not given, will substitute "work.doc" .

.<text> - indicates that the rest of the line is a comment.

EXAMPLE: . Dot, followed by space is a comment.

.<return> - indicates a blank comment line.

Further examples

The following sequence is used to delete a file, but make a backup first in the :T subdirectory.

. Delete a file, but make a backup first

.KEY from,to

IF "<from>" EQ ""

QUIT 20;this terminates the CSF immediately

ENDIF

IF "<to>" EQ ""

COPY <from> TO :T/<from>.Old

DELETE <from>

QUIT

ENDIF

COPY <from> TO :T/<to>

DELETE <from>

QUIT

This would be entered as follows (if the name of the CSF is BACKUP): EXECUTE BACKUP filename1,filename2
Till next time ...

Great bargains for your C64/128! Australian Commodore Review Disk Mags Nos 1 to 14	
Disk Magazine One \$10 Forest Raiders - shoot 'em up. Machine code paint, border, input and flash routines. Nice Lister. Recover It.	Disk Magazine Ten \$12.95 Cup challenge - sailing simulation. Define your function keys. Compiled Appointment Manager. Escos with Music. Othello Look-alike. And more.
Disk Magazine Two \$10 Programs demonstrating 3D graphic plots. Terminal program. Tutorial on bits and bytes. Character editor.	Disk Magazine Eleven \$12.95 80 Characters, Graphic Converter, Batch line no. deleter, Function key def, System call locator. Fix directory, Text search, Disk tidy, Drive aligner. Geos printer drivers.
Disk Magazine Three \$10 Hangman, Labyrinth, Calendar, Finance, Typing Practice, Roadblock, Bird Invaders. Constructabrix - education.	Disk Magazine Twelve \$12.95 Appointment Manager 2.1. Third Term - comms program. Panes - windowing system. Atlantis - undersea shoot-em-up. Circle Navigation, Education Programs, Music.
Disk Magazine Four \$10 Graphic Workshop - complete design system/tutorials. Typing Tutor. Directrix - disk filing. Plurals & maths.	Disk Magazine Thirteen \$12.95 Charles & Stowaway - adventures. Blackjack. Graphic Converter. Disk Diskassy - utility. Disk Label Maker, Icon Changer. Easy DOS. Cruncher Basic. Calc. Font Diskassy.
Disk Magazine Five \$10 Utilities for using Newsroom on an MPS 802 plus writing signs, printing Doodle/Printshop pics. Centronics driver.	Disk Magazine Fourteen \$12.95 Electronic CAD Package. Software Cataloguer. Character Thief. Pointer C64. Best single disk file copier. Never ending scrol. SEQ file readert. CompuPage - game.
Disk Magazine Six \$12 Games: Bert the Bug, Hangman. Demos: Space Harrier, Max Headroom, etc. Home Inventory. Graphics. Utilities.	<div style="border: 1px dashed black; padding: 5px;"> <p>To: Australian Commodore Review, 21 Darley Rd, Randwick, NSW 2031. (02) 398 5111.</p> <p>Please send me Disk Magazine(s) No(s):</p> <p>I enclose Cheque/Bankcard/ MoneyOrder</p> <p>Bankcard No:.....</p> <p>Exp Date.....</p> <p>Signature.....</p> <p>Name (print).....</p> <p>Address.....</p> <p>.....Postcode.....</p> <p>Please add \$2 for post and packing</p> </div>
Disk Magazine Seven \$12 Anti-Isepic, Sledgehammer, Fast Format, Renumbr, etc. 128: Bootmaker 128/64 Utility, Convert Basics utility.	
Disk Magazine Eight \$12 Track & Sector, Function Keys, Unscratched, Relocatable directory. Calendars, Chequewriter. ESCOS v 2.99.	
Disk Magazine Nine \$12 C64: 14 graphics & music demos, Little Invoicer, Sprite Clock, Sprites in Border, games, utilities and graphics.	

<h2 style="text-align: center;">AMIGANET</h2> <p style="text-align: center;">Ethernet network for Amigas</p> <ul style="list-style-type: none"> • Industry standard Ethernet Architecture. • Networking software included. • True peer-peer Amiga Networking - access any screen, hard or floppy drive, serial or parallel printer attached to any Amiga on the network. • A500 version - ABS injection moulded case connects to expansion port of computer. • A2000 version enhanced with 64Kbytes data buffer with 16bit datapath assisted by a DMA sequencer. (For high traffic centralised facility or a file server. <p>AmigaNet A500 \$700.00 (ex tax) AmigaNet A2000 \$900.00 (ex tax)</p> <h3 style="text-align: center;">GP Term-64</h3> <p>(videotex and ascii communications for C64/128, rrp \$59.00).</p>	<h2 style="text-align: center;">GP Term-Amiga V4</h2> <p style="text-align: center;">Australia's most popular Amiga telecommunications software</p> <ul style="list-style-type: none"> • Mouse or keyboard driven, fully multitasking from CLI or workbench, User defined 'configurations' for different services, 110 page manual and more. • Full terminal emulations for videotex and ANSI/Amiga, IBM, VT100 ANSI terminal emulations for Viatel & Discovery 40/80, Pegasus and other text based services as well as BBSs. • File transfer with XModem, YModem, full ZModem, SEALink, KERMIT, Punter and ASCII protocols. Batch transfers supported. <p>Packaged with an extensive manual, not copy protected \$99.00</p> <p>Also available: Amiga and C64 Modem packages, & full range of NetComm and AVTEK modems.</p>
<p>Available from your local dealer or direct from</p> <h1 style="font-size: 2em;">GP Software</h1> <p style="font-style: italic;">Specialists in Amiga Communications</p> <p>21 Aloomba Rd ASHGROVE Qld 4060 Ph (07) 366 1402</p>	

Make sure of getting your copy

SUBSCRIBE NOW!

The Australian COMMODORE and AMIGA REVIEW

Please enrol me for issues subscription to The Australian Commodore and Amiga Review, commencing with the issue.

☐ I enclose a cheque/money order for \$

☐ Please charge my Bankcard

Number

Expiry date:

Name:

Address:

.....

Postcode:

Please tick applicable box
First Subscription ☐
Renewal ☐

Rates within Australia:
6 issues \$19.00 (inc postage)
12 issues \$36.00 (inc postage)
Postage extra for overseas - telephone for costs

Post to:
21 Darley Road,
Randwick NSW 2031
Phone (02) 398 5111
Fax: (02) 398 5322

C64 Sound & Graphics

by Greg Perry

Easy sprites

Once you have the general idea about how the sprites are controlled, we can begin to use them in programs. We will look at a number of simple but interesting techniques which you should be able to adapt to your own programs.

Example: sprites as string data. The following program displays three sprites using the same sprite data for each. The sprite pattern of the number 64 sitting under a palm tree, is set up in the data statements as string data. This pattern can be readily changed by editing the program in the normal manner.

Calculation of the correct 63 numbers for the sprite pattern is done by dissecting the strings (check out the method used and work out how it does it, Lines 320-350) and the numbers are shown on the screen as they are calculated. An "A" in the data string is taken as a screen dot with bit value of 1 and a space is taken as bit value of 0. The sprites used are sprite numbers 0-2.

Points to note:

- All three sprites use the same data block.
- Remember that sprite 0 has priority over 1 and 2 and so will appear over the top of the images of the other two.
- The sprite-background priority has

been altered for sprite 1 so that it will pass underneath the screen image.

- All the sprites are programmed to randomly expand in either direction when they cross at the centre of their travels.

- For simplicity, sprite X position is never greater than 255.

```

Program: SPRITE GENERATOR
10 REM (C) GREG PERRY, BRISBANE
1984
100 REM SIMPLE THREE SPRITE
GENERATOR
110 REM SN=SPRITE NUMBER
120 REM V=START OF VIC CHIP
130 V=53248
140 REM SET EXPANDED SPRITES
150 POKE V+23,7: POKE V+29,7
160 REM CLEAR SPRITE RAM ARE-
AS
170 FOR I=832 TO 1023: POKE I,0:
NEXT
180 REM SET SPRITE POINTERS TO
DATA BLOCK
190 POKE 2040,13: POKE 2041,13:
POKE 2042,13
200 REM POSITION SPRITE X AND Y
ON SCREEN
210 FOR SN=0 TO 2
220 POKE V+SN*2,100+SN*10: REM
X POS
230 POKE V+1+SN*2,100+SN*20:
REM Y POS
240 REM ENABLE SPRITE SN
250 POKE V+21, PEEK (V+21) OR

```

```

(2^SN)
260 REM SET Colour OF SPRITE SN
270 POKE V+39+SN,2+SN: NEXT
280 REM READ DATA AND CALCU-
LATE BYTE NUMBERS
290 FOR ROW=0 TO 20
300 READ S$: PRINT S$:
310 FOR NO=0 TO 2:N=0
320 FOR BIT=7 TO 0 STEP -1
330 REM CALCULATE NUMBER
340 IF MID$(S$,1+NO*8+7-
BIT,1)="A" THEN N=N+2^BIT
350 NEXT BIT
360 REM PUT NUMBER INTO IMAGE
MAP
370 POKE 832+ROW*3+NO,N: PRINT
N:
380 NEXT NO: PRINT
390 NEXT ROW
400 REM DISPLAY BACKGROUND
AND MOVE SPRITES
410 PRINT "[CLR,DOWN4,RVS]";:
FOR I=1 TO 40*6: PRINT "[<Q>]";:
NEXT
420 REM SET SPRITE 1 TO UNDER
SCREEN
430 POKE V+27,2
440 REM NOT EXPAND X AND Y
450 POKE V+23,0: POKE V+29,0
460 REM MOVE SPRITES
470 S=255: FOR I=1 TO 255
480 POKE V,I: POKE V+1,I
490 POKE V+2,S-I: POKE V+3,S-I
500 POKE V+4,I: POKE V+5,S-I
510 IF I<>128 THEN 570
520 REM RANDOMLY EXPAND
SPRITES IN X &/OR Y
530 IF RND (0)>.2 THEN POKE V+23,
RND (0)*7+.5
540 IF RND (0)>.2 THEN POKE V+29,
RND (0)*7+.5
570 NEXT: GOTO 450
600 REM SPRITE DATA
700 REM
"765432107654321076543210"
710 DATA "[SPACE5]AAA
[SPACE3]A[SPACE3]AAA[SPACE6]"
720 DATA "[SPACE4]AAAAA
[SPACE2]A[SPACE2]AAAAA
[SPACE5]"
730 DATA "[SPACE3]AA
[SPACE4]AAAAAA[SPACE4]AA
[SPACE4]"
740 DATA "[SPACE2]AA[SPACE4]A
[SPACE2]A[SPACE2]A[SPACE4]AA
[SPACE3 ]]"
750 DATA "[SPACE]AA[SPACE8]A
[SPACE8]AA[SPACE2]"
760 DATA "AA[SPACE9]A
[SPACE9]AA[SPACE]"
770 DATA "A[SPACE10]A
[SPACE10]A[SPACE]"
780 DATA "[SPACE11]A[SPACE12]"
790 DATA "[SPACE2]AAAAAAA
[SPACE2]A[SPACE2]AA[SPACE8]"
800 DATA "[SPACE2]AAAAAAA
[SPACE2]A[SPACE2]AA[SPACE8]"
810 DATA "[SPACE2]AA
[SPACE3]AA[SPACE2]A
[SPACE2]AA[SPACE8]"
820 DATA "[SPACE2]AA[SPACE7]A
[SPACE2]AA[SPACE8]"
830 DATA "[SPACE2]AA[SPACE7]A
[SPACE2]AA[SPACE8]"

```

Big news for computer owners

You can obtain a tremendous variety of programs for your computer in Public Domain software. Programs of all types including Demos, Educational, Games, Graphics, Music and Utilities, etc.

OUR LIBRARY HAS DIVISIONS FOR
COMMODORE 64, AMIGA, IBM
AND COMPATIBLES INCLUDING
COLT, AND APPLE II.

Just two examples:

GAMES MEGAPAK - over 350 Games
for C64 on 20 disk sides for only \$40 posted.
EDUPAK 1 - 267 Educational programs for
C64 on 16 disk sides for \$32 posted.

Write for details to:

Allan Crouch
29 Happ St. Auburn NSW 2144
Phone: 649 4904

AMIGA PUBLIC DOMAIN SOFTWARE

Over 1800 disks to choose from

- No subscription fees
- No joining fees
- No postage charges
- Disks \$3 - \$4 - \$5 each

Send \$3 for catalogue disk or \$9.95 for
catalogue disk and 2 disk starter pack
which includes: virus program, games,
utilities, graphics, music, and articles.
Catalogue disk upgraded free any time.

AMIGA PUBLIC DOMAIN CENTRE

PO Box 435, St Agnes SA 5097

Phone (08) 396 2163

Fax (08) 396 2163

WE ACCEPT BANKCARD AND MASTERCARD


```

840 DATA "[SPACE2]AAAAAAA
[SPACE2]A[SPACE2]AA[SPACE]AA
[SPACE5]"
850 DATA "[SPACE2]AAAAAAA
[SPACE2]A[SPACE2]AA[SPACE]AA
[SPACE5]"
860 DATA "[SPACE2]AA
[SPACE3]AA[SPACE2]A
[SPACE2]AA[SPACE]AA[SPACE
5]"
870 DATA "[SPACE2]AA
[SPACE3]AA[SPACE2]A
[SPACE2]AAAAAAA[SPACE3]"
880 DATA "[SPACE2]AAAAAAA
[SPACE2]A[SPACE2]AAAAAAA
[SPACE3]"
890 DATA "A[SPACE]AAAAAAA
[SPACE]AAA[SPACE4]AA
[SPACE3]A[SPACE]"
900 DATA "A[SPACE8]AAAAA
[SPACE3]AA[SPACE3]A[SPACE]"
910 DATA
"AAAAAAAAAAAAAAAAAAAAA
[SPACE]"

```

Exercises

1. Design your own sprite in data statements.
2. Change sprite colours.
3. Change sprite movement routine.
4. Change movement to include full range of X 0-344.
5. Change expansion to X or Y expand only.

Example: Bouncing and full range of X. To program a sprite to "bounce" around the visible screen area, like a ball on a billiard table, involves increasing or decreasing the X and Y coordinates and ensuring that, when the boundary (as defined above) is reached, the corresponding X or Y movement is reversed in direction. This is shown by the following subroutine.

Add these Lines to the program above.

```

550 REM RANDOMLY BOUNCE
SPRITE
560 IF RND(0)>.2 THEN GOSUB 590
580 REM BOUNCE SPRITE AROUND
SCREEN
590 X=128:Y=128 592 S1=1+2*(RND
(0)>.5):S2=1+2*(RND(0)>.5) 594
SN=INT(RND(0)*3)
600 X=X+5*S1:IF X<=24 THEN S1=-1
610 IF X>=343 THEN S1=-1
620 Y=Y+10*S2:IF Y<=50 THEN S2=-1
630 IF Y>=229 THEN S2=-1
640 POKE V+16,2^SN+2^SN*(X<256)
650 POKE V+SN*2,X+256*(X>255)
660 POKE V+1+SN*2,Y
670 IF X>90 AND X<130 AND Y>90
AND Y<130 THEN RETURN
680 GOTO 600

```

NOTES

1. Line 590 sets the starting coordinates.
2. The RND statements are used with great effect to decide how often a bounce will occur and, when one does, to randomly select which of the sprites 0-2 will move and in what direction.
3. S1 and S2 are the signs of the X and Y movement respectively, i.e. when S1 = 1, the X value will increase and when S1 is -1, the X value will decrease. At the boundary, the sign of the movement is simply reversed. Line 592 randomly sets these to either 1 or -1. The expression $2*(RND(0)>.5)$ is zero if RND(0) is less than 0.5, otherwise it equals -2.
4. The full range of X is used, Lines 640 and 650. Line 670 returns to the main program if the bouncing sprite is roughly near the other two.

Further examples of bouncing sprites are given later.

Multicolour sprites

Once you understand how to create high resolution sprites, the construction of multicolour sprites is only slightly more complicated.

A number of salient features must be noted. First, the effective horizontal resolution of the pattern is reduced to 12 dots but, in the sprite image on the screen, each dot is now displayed as two pixels wide. Each of these pixel pairs may be in one of four colours. The sprite is still constructed on the 24 by 21 grid, but to convey the colour information each horizontal dot is set with a pair of bits.

Each of the four combinations available in this bit pair describes the colour of the screen dot, either transparent ("off" or screen colour), the main sprite colour or one of the two sprite multicolours.

Bit	Pair	Colour	Colour Register
left	right	on screen	location
0	0	transparent - screen colour	53280
0	1	multicolour 0	53285 (V+37)
1	0	sprite colour	V+39+SN
1	1	multicolour 1	53286 (V+38)

Let's assume we wish to draw a single line (12 screen dots of 24 pixels) evenly divided into the four colours. The first three dots will be in multicolour 0, the next three transparent ("off", screen colour), the next three in the selected sprite colour, and the last three in multicolour 1. The line of 24 bits (3 bytes) will be

continued on p 64

MEMORY EXPANSION PRICES at July 10th

1MB x 1 - 80ns	DIP	\$6.35
4x256 - 100ns	DIP	\$6.90
- 80ns	DIP	\$6.75
41256 - 120ns	DIP	\$6.90
- 100ns	DIP	\$2.00
1MBx4 (44C1000) 80ns	A3000 ZIP	\$31.00
1MBx4 (44C1002) 80ns	col static ZIP	\$36.00
1MBx8 - 100ns	simms (G.V.P. Hard Drive)	\$53.00
x8 - 80ns	simms	\$60.00
1MBx9 - 100ns	simms	\$58.00
- 80ns	simms	\$68.00
4MBx9 - 80ns	simms	\$272.00

All types of DRAM & memory modules in stock
Please phone for the latest prices. Sales tax 20%.
Overnight delivery, credit cards welcome.
1st floor, 100 Yarrara Rd, Pennant Hills 2120
PO Box 382, Pennant Hills 2120

pelham PTY LTD

Tel: (02) 980 6988 Fax: (02) 980 6991

AUSTRALIA'S CHEAPEST DISKS

"NO BRAND" LIFETIME WARRANTY BOXES OF TEN DISKS					
	1-9	10+	50+	100+	500+
5 1/4"DS/DD	\$5.10	\$4.90	\$4.80	\$4.70	\$4.60
5 1/4"DS/HD	\$10.50	\$9.95	\$9.50	\$9.25	\$8.75
3 1/2"DS/DD	\$9.75	\$9.50	\$9.25	\$9.00	\$8.50
3 1/2"DS/HD	\$19.50	\$18.70	\$18.50	\$18.00	\$17.95

ROD IRVING ELECTRONICS

MELBOURNE: 48 A'Beckett St City. Ph: (03) 663 6151
NORTHCOLE: 425 High St. Northcote Ph: (03) 489 8866
SYDNEY: 74 Parramatta Rd. Stanmore. Ph: (02) 519 3134
MAIL ORDER: 56 Renner Rd. Clayton. Ph: (03) 543 7877
MAIL ORDER HOTLINE (TOLL FREE) Ph: 008 33 5757
DEALERS: GREENSBOROUGH COMPUTERS:
103 Grimshaw St. Greensborough. Ph: (03) 434 6166
MICRODOT: 177 Springvale Rd. Nunawading Ph: (03) 894 1255
BLUESTAR COMPUTERS:
271 Maroondah Hwy, Ringwood. Ph: (03) 870 1800

KICKBOARD

HOLDS BOTH YOUR KICKSTART ROMS
IN ONE EASY TO FIT QUALITY BOARD
WHICH IS SWITCHED EXTERNALLY

TO SUIT A500/2000 **KICKBOARD \$39-90**

TRANSBOARD

USE YOUR EXTERNAL DRIVE TO BOOT
OFF, SWAP INTERNAL V's EXTERNAL
JUST SWITCH AND RE-BOOT [Ctrl+A+A].
eight wires- requires good soldering ability.

12 MONTH WARRANTY ON BOTH BOARDS **TRANSBOARD \$49-90**

Phone orders by Mastercard / Bankcard welcome
Post & handling add \$3-60 anywhere in Australia
order today-despatched today by Australia post
Proudly manufactured in Australia by Unitech

UNITECH ELECTRONICS PTY. LTD.

AUSTRALIAN COMPANY NUMBER 003864042
UNITECH ELECTRONICS ESTABLISHED 1978 UNITECH ELECTRONICS

INDEPENDENT REPAIRS TO COMMODORE PRODUCTS

PHONE: 02 820 3555 10am- 6pm
P.O. Box 137, MINTO. N.S.W. 2566

Prime Artifax Public Domain

Amiga-Live Issue Six

\$24.95 (3 disk set)

FEATURE Game

Drip: A full blown arcade game that's very out of the ordinary. It's up to you, as the 'Drip', to rust your way up 15 floors and get the juices flowing again. Avoid running or dripping into the acid, plasma and icecubes shooting out of pipes. You can get a little help from party balloons and bubbles that float by. Drip requires 512k of memory.

Entertainment

BoingDemo: Despite the name, this is not a demo as such - it's one of those try before you buy versions of a commercial game, only this one is very playable. The Boing part is a salute to the original Amiga Boing Demo! In this level and ladders game, you travel about on poles, ladders, teleport points and at all costs avoid the Boncing Amiga Ball!

RollOn: The play is a little like Boulderdash or Emerald Mine. Eight levels are included. To win you need to plan ahead and organise your moves carefully - sort of a joystick strategy. Includes a level editor to design your own games.

SlotCars: A complete working game of SlotCars...just one of four games in the commercial package known as: 4 IN ONE - EASY BUT FUN! The game concepts are simple but addictive. A combination of strategy and dexterity is needed to beat this one.

MoonBase: Adventure/Arcade - guide the shuttle ship to and from the mother ship with the valuable cargo. A multi-level lunar lander.

Strategy

Turn: A strategy game - the aim of which is to produce a given pattern of stones on the board. In order to complicate the game a little bit, all stones around the selected stone will turn either from black to white or from white to black. There are 18 levels available. There's also a pattern editor to design your own games.

China Challenge: Similar to the well known game Shanghai or Mahjong, the target of China Challenge is, to remove all parts of the pile, the so called Dragon, step by step. This dragon is composed out of 120 different pieces. A challenging past time, fun for two players too!

MarbleSlide: You've got to be quick to get this one. This is the fullest extent to which we've ever seen the old magic square theme taken - and one of the best. Slide the sliders to guide the marble home. But your time is VERY limited!

AmiGo: Strategy Board game for one, two or no players!

Workbench

SimGen: How would you like Saturn on your Workbench? SimGen makes your screen look like it is Genlocked. A number of example images are included. Much better than DropCloth or any other of these Workbench background programs. Doesn't slow your Amiga down either!

Flip: This screen gag will drive you nuts. Try it out!

Rocket: Yet another in the great line of Workbench gags. This little number releases a guided rocket which heads straight for your mouse pointer. If you don't move in time, on impact the whole lot explodes. Stick it on a friends Workbench for fun!

Business

Liner: Our serious program for the month. If you develop outlines for speech, writing, essays or reports, this program will help you organise and edit your material in point form - the best way to develop an outline. A fast solid program.

WO: A short and quick utility, which helps you to bring order in your addresses and codes them and saves them (password-encoded) on disk.

Graphics

MandAnim: If you enjoy madlebrot, you'll love MandAnim. Using a simple tweening process, you can select multiple key areas of a mandlebrot. MandAnim will generate as many steps as you specify between each frame creating an expanded animation file which you can load and animate in Deluxe Paint III. Some impressive graphics can be achieved.

Hennon: You can create some fabulous looking images using this program which lets you explore Hennon mapping. The program produces patterns like the one below using the formula $x = x * \cos(a) - (y - x * x) * \sin(a)$ and $y = x * \sin(a) + (y - x * x) * \cos(a)$. Several example images are included. Full 640 x 400 hires is supported.

plus FREE \$5.50 Graphics or Animation disk of your choice with Amiga Live 6.

Save on Back Issues!

Amiga Live #1 (2 disk set)	\$8.95
Amiga Live #2 (2 disk set)	\$11.95
Amiga Live #3 (3 disk set)	\$18.95
Amiga Live #4 (3 disk set)	\$18.95
Amiga Live #5 (3 disk set)	\$24.95

Emulators and File Transfer

Transformer v1.22 \$7.95

Get into MS-DOS on the cheap. Much faster than the original Transformer. 68030 compatible. Requires MS-DOS on a 720K diskette. No documentation. Also included is a demo version of iBeM, another emulator that allows use of hard drives. The demo only allows 2Mb partitions.

MS-DOS Theme Disk \$5.50

Install a full MS-DOS device using a simple install icon. You can then read/write 720K IBM disks and format them too! MSH: acts like any other Amiga device. You can share the selected drive between MS-DOS and AmigaDOS. Full documentation and other useful utilities included.

C64 Emulator \$5.50

A very full-blown C64 emulator. Lots of utilities, more menu control and transfer options than previous commercial programs. If you like what you see you'll need to purchase the serial interface direct from the U.S.A. - full details included with the disk. Full documentation on disk.

Educational

Chemistry \$5.50

Chemesthetics allows you create a atomic model of different formulae and visual chemical structures - a great teaching tool.

New Titles Coming Soon

Pagestream 2.0+ PD Fonts

Balleten	Flinstone	Park
Benjamin	HorstCap	Pixie
Blackforest	Judas	Playbi
Cartwright	LeeCaps	Pollo
Class	Manzanit	+ many more
Faustus	Muriel	

TWO DISK SET
\$8.95

New Games and Graphics! Ray-Tracing Theme Disks

The best way to enter into the world of Ray-Tracing, DBK-Render allows you to create some amazing scenes.

\$5.50

Real 3D Demo

Get a taste of the power of this incredible new program.

\$5.50

Lemmings Demo

One of the best games for those with a taste for the unusual, an enigma in the gaming world. A playable demo that will keep you entertained!

\$5.50

Spectracolour Demo

One of the latest programs to enter into the world of Amiga graphics - worth having a look at!

\$5.50

• SPECIAL OFFER • PD STARTER-KIT

**OVER \$50 VALUE
FOR JUST \$34.95**

Super Workbench ~~Normally \$8.95~~

Ready to boot with lots of utilities.

Anti-Virus Pak \$14.95

Protects against infection and eradicates over 45 known strains!

Business 1 \$8.95

Star Trek \$8.95

(AGATron, full graphics version)

Newtek Demo II \$8.95

The Lot ONLY \$34.95

(7 Disks Full • Free postage)

NCOMM v1.22

Best Comms package available

- ANSI / VT100 terminal emulation with full 16 colour text support. IBM graphics (optional). Interlaced screen (optional). PAL and NTSC support. Works with WB overscan. OS 2.0 support.
- Protocols: ASCII, Xmodem, Xmodem-CRC, Ymodem, Ymodem-Batch, Ymodem-G. Fast Zmodem and Kermit protocols using external libraries. Full support for custom XPR libraries. Batch uploads and downloads.
- Script language - simple text language automates sessions. Advanced Host-Mode script follows program - RUN YOUR OWN BBS!
- Optional scrollbar buffer - view or save text that previously has been displayed on screen. Block functions. Real-time scrolling.
- Hot Keys for most program functions, including dialing of up to 10 phone numbers.
- Split screen mode for conferencing.
- Dialing directory, queued dial, redial until carrier received.
- 46 entry fast phonemenu. Phone requester with unlimited entries.
- 20 keyboard macros using function keys.
- Internal multitasking.

Only \$5.50

Brilliant music sequencer! MED 3.00

Imagine Soundtracker with MIDI - well that's what you have your hands on! Included are some sample tunes.

\$5.50

Cinema Samples

10 disk full of movie samples - "Go ahead make your day!"

\$34.95

Remix 1

Madonna and Blackbox sing mega remixes.

\$5.50

Tracks No. 5

Bond, Fresh House and Wasteland.

\$5.50

POSTAGE IS FREE • NO HIDDEN COSTS • FULL SUPPORT

"Software you CAN afford"

Theme Disks

Anti-Virus PAK	\$14.95
Protect and Eradicate	
ARP 1.3	\$5.95
Faster CLI, more disk space	
Atari Emulator	\$5.50
Runs some applications, plus utils.	
Business 1	\$8.95
Calc, Bankn, Badger, AmiGant, HP11 and Loan Calc	
Business 2	\$8.95
Mempad, IRA, DisSecretary	
Calendarm and StockBroker	

MS-DOS theme disk.	\$5.50
Icon driven MS-DOS reader	
Sound Tracker Modules	\$5.50ea.
Four disks available.	
Super Workbench 1MB	\$8.95
SID, Dmouse more	
Star Trek	\$8.95
AGATron version. Very good.	
Super Workbench 512	\$8.95
Zippy, Dmouse more	
Text Editors	\$8.95
Wordprocessing	\$8.95
TextPLUS, AmigaFox, Calendar Label Print, PrintStudio Lila, GwPrint and Outliner.	

Graphics and Animation

Ace #06	\$5.50
Ace #09	\$5.50
Ace #14	\$5.50
Ace #17	\$5.50
Ace #18	\$5.50
Ace #19	\$5.50
Ace #20	\$5.50
Amy vs Walker	\$5.50
Artscape	\$8.95
Badge Demo Set - 3 Disks	\$12.50
Busy Bee	\$5.50
Batdance	\$5.50
Cameron Scanner	\$5.50
Crionics	\$5.50

HUGE 500+ FISH DISK LIBRARY

See complete list of 400 - 480 in July Professional Amiga User

FISH \$5.50

10 or more
\$5.00 each

CAD	\$8.95
Compilation of the best CAD in PD	
Communications	\$8.95
JRCOMM, ARC, ZOO and useful tips.	
Communications 2	\$8.95
VAXterm, Hyperdialer etc	
C64 Emulator	\$5.50
Full-blown, more options.	
DOS Utilities 2.0	\$14.95
All the best utils yet!	
DTV Still Store	\$5.95
Still frame playback.	
DTV/Graphics	\$8.95
Abridge, Title Generator,	
sMOVIE, ImageLab and more.	
Education 1	\$5.50
Elements, SpaceLog, DrawMap etc.	
Education 2	\$5.50
Gravity-well, Planets, Life-cycles, Orbit..	
Hacker 1	\$5.95
PowerPacker, Sound Scanner plus many more.	
Mandlebrot Set (6 Disks)	\$24.95
A complete set of Madlebrot & Julia programs taken from the Public Domain.	
Mr Sandman	\$8.95
Digitised sound demo (2 disks).	

Our Service

Order Processing

Most orders are processed within 24 hours of receipt. You will not be charged if you're paying by credit card until the goods have been dispatched. Orders are sent by surface mail - however, we do have a range of courier services available if you need speedier delivery.

Support

If you have a more obscure problem, write down the error or problem and call for advice. It is best if you can also have the disk or program ready at your computer as this can help us help you quicker. Please use our Support number on (02) 879 7455.

What if it doesn't work?

If for some reason, the disk you buy is damaged - just return it for a free replacement. Please include a short note explaining the problem which occurred and your correct return address, and day time phone number.

CSIRO Sat-Piccies	\$5.50
Cycle Ball Demo	\$5.50
Digi-Slide Show 1	\$5.50
Digi-Slide Show 2	\$5.50
Dragon's Lair Demo	\$5.50
Epic Demo	\$5.50
Gymnast	\$5.50
Kanakas	\$5.50
Luxo Teenager	\$5.50
Music Mania #10	\$5.50
Music Mania #12	\$5.50
Music Mania #13	\$5.50
Newtek Demo 1	\$8.95
Newtek Demo 2	\$8.95
Northstar Demos	\$8.95
PC87 Slide Show	\$5.50
RGB Hazzards	\$5.50
Soundtracker 5-Set	\$22.00
Space Ace Demo	\$5.50
Stamp Collector	\$5.50
Schwartz Anim Set (2 disks)	\$8.95
Vaux Killer (1MB)	\$8.95
Walker 1 (1MB)	\$5.50
Walker 1 (2MB)	\$8.95
Walker 2 (2MB)	\$8.95
Walking Cat	\$5.50
Zues Demo	\$5.50

How To Order



NATIONAL

(008) 252 879 FREE CALL
Orders Only.

(02) 879 7455 Sydney Metro

Prime Artifax
P.O Box 288
Gladesville 2111



**Fish Database
· H D ·**

**A catalogue of all the Fish
from 1 to 470
(Hard drive required!)
\$5.50**

How to Pay

1. Credit Card - Visa, Mastercard or Bankcard.
2. Send a cheque or money order.
3. Cash on delivery. Collect from your post office and pay them (extra \$4.50 Australia Post charge.)

ORDER FORM

Name

Address

Day Phone

Card No.

Exp Date Visa ☐ B/C ☐ M/C ☐

Signature

PRODUCTS

.....

.....

.....

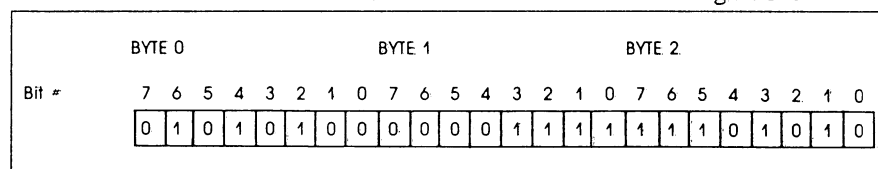
.....

.....

.....

BIT PAIR	0	1	2	3	4	5	6	7	8	9	10	11
	X	X	X				X	X	X	X	X	X
	multicolor0			transparent			sprite color				multicolor1	

Figure 5-6



To change a sprite from high resolution to multicolour involves setting the appropriate bit in the sprite multicolour select register.

```

For Sprite SN
select multicolour
POKE V+28,PEEK (V+28) OR 2^SN
select high resolution
POKE V+28,PEEK (V+28) AND (255-
2^SN)

```

Some examples are:
 set sprite 2 to multicolour
 POKE V+28,4
 set all sprites to multicolour
 POKE V+28,255
 set all sprites to high resolution
 POKE V+28,0

One of three colours (called the sprite colour above) is the same as for high resolution mode and is set according to the sprite number ($V+39+SN$). The other two are common for all multicolour sprites and are set by

Multicolour 0 POKE V+37,colour (0-15)
Multicolour 1 POKE V+38,colour (0-15)

Note: A PEEK to these locations after a RUN/STOP and RESTORE returns the values of 244 and 240 respectively, since the left-most four bits in these locations are always set to ones, the default colours are therefore 4 [PUR] and 0 [BLK].

As an example of using multicolour sprites

1. Replace the following lines in the sprite generator program.

```

690 REM MULTI-Colour SPRITE DATA
700 REM
"765432107654321076543210"
710 DATA"[SPACE24]"
720 DATA"[SPACE24]"
730 DATA"[SPACE24]"
740 DATA"[SPACE6]AA[SPACE8]AA
[SPACE6]"
750 DATA"[SPACE8]AA[SPACE4]AA
[SPACE8]"
760 DATA"[SPACE10]AAAA

```

```

[SPACE10]"
770 DATA"[SPACE8]A[SPACE]A
[SPACE]A[SPACE]A[SPACE9]"
780 DATA"[SPACE6]A[SPACE]A
[SPACE]A[SPACE]A[SPACE]A
[SPACE]A[SPACE 7]"
790 DATA"[SPACE4]A[SPACE]A
[SPACE2]A[SPACE]A[SPACE]A
[SPACE]AA[SPACE]A[SPACE5]"
800 DATA"[SPACE2]A[SPACE]A
[SPACE2]A[SPACE]A[SPACE]A
[SPACE]A[SPACE]A[SPACE]AA
[SPACE]A[SPACE3]"
810 DATA"A[SPACE]A[SPACE]A
[SPACE]A[SPACE]A[SPACE]A
[SPACE]A[SPACE ]A[SPACE]A
[SPACE]A[SPACE]A[SPACE]A
[SPACE]"
820 DATA"[SPACE4]A[SPACE]A
[SPACE]A[SPACE]A[SPACE]A
[SPACE]A[SPACE ]A[SPACE]A
[SPACE5]"
830 DATA"[SPACE6]A[SPACE]A
[SPACE]A[SPACE]A[SPACE]A
[SPACE]A[SPACE ]A[SPACE5]"
840 DATA"[SPACE8]A[SPACE]A
[SPACE]A[SPACE]A[SPACE]A
[SPACE7]"
850 DATA"[SPACE8]AA
[SPACE6]AA[SPACE6]"
860 DATA"[SPACE4]AAAA
[SPACE10]AAAA[SPACE2]"
870 DATA"[SPACE24]"
880 DATA"[SPACE24]"
890 DATA"[SPACE24]"
900 DATA"[SPACE24]"
910 DATA"[SPACE24]"

```

and to select multicolour mode, add the line

135 POKE V+28,7

RUN the program and look at the pattern to decipher how the colours are achieved.

2. Change the default multicolours by selecting two colours then add the Lines

136 POKE V+37, colour
137 POKE V+38, colour

```

720 DATA "
730 DATA "
740 DATA "      AA          AA
750 DATA "          AA      AA
760 DATA "              AAAA
770 DATA "          A A A A
780 DATA "      A A A A A A
790 DATA "      A A A A AA A
800 DATA "  A A  A A A A A A A
810 DATA "A A A A A A A A A A
820 DATA "      A A A A A A A
830 DATA "          A A A A A
840 DATA "          A A A A
850 DATA "      AA          AA
860 DATA "      AAAA          AAAA
870 DATA "
880 DATA "

```

ESSENTIAL READING

☆ Complete up to date list
of software available in
Australia with description,
price, availability, etc

☆ User Group List ☆ Fish
Disk List ☆ Graphics ☆
Word processing

☆ Databases ☆ Hard Drives

☆ Communications ☆
Music ☆ Desktop Video ☆
Multimedia

And lots more !

**On sale at newsagents
and computer dealers
NOW**

only \$6.95

Phil Campbell's Entertainment

All the latest news and views from the world of Entertainment

New Budget Titles From Pactronics

Aquanaut, by the producers of *The Krystal*, has just been released as part of the new Pactronics budget line at a remarkable RRP of \$19.95. With three disks crammed full of action it's a definite bargain. *Star Goose*, another nice blast from the past, *Prospector in the Mazes of Xor*, *Eye of Horus*, (a platform style arcade adventure), *Bad Company*, *Starblaze* (a 3-D space shoot-em-up), *GFL Baseball*, *GFL Golf* and *Hyperforce* are part of the new range too - watch out for them in your local computer store.

ACAR Hints Disk improved

Reader Adrian Jenkin of Elizabeth North, SA, has put a lot of time and effort into improving our hints and tips disk. Now the hints are arranged in al-

phabetical order, and split into convenient subdirectories - well done, Adrian. Remember, you can get your own *ACAR Hints Disk* by sending a blank disk, a stamped, self addressed envelope, and a cheque for \$5.00 to Phil Campbell, PO Box 23 MacClean NSW 2463. Make sure your SSAE is big enough for a disk!

CD-TV released at last

By now, some of our readers may even be messing round with their very own CD-TV! The entertainment machine of the decade was released at the World of Commodore show at Sydney's Darling Harbour last month to crowds of drooling punters. Here at the ACAR Entertainment section we'll certainly be keeping you posted on all the CD-TV developments.

MINDSCAPE

Wonderland winners

This would have to rate as the most successful competition we have ever run! We had everyone running to their encyclopedias to discover that Lewis Carroll was really Charlie Dodgson, a boring old Maths lecturer, that Alice was based on Alice Liddell, and that the hare was a March Hare. Well done, and even if you didn't win, at least you can say you learned something. Who says ACAR isn't an educational mag? So without further ado, congratulations go to:

Anne McLennan of Mt. Austin NSW

Andrew Foster of North Rocks NSW

Robert Davidson of Greensborough VIC

Francis Leeken of Milperra NSW

Paul Veselovsky of Wilston QLD

You'll be sure to enjoy WONDERLAND - the classiest adventure game yet. Thanks to Mindscape for the prizes.

MINDSCAPE AUGUST COMPETITION

SPIRIT OF EXCALIBUR

Here's a chance to join in some hair raising medieval action. MINDSCAPE are giving away five copies of

SPIRIT OF EXCALIBUR, and

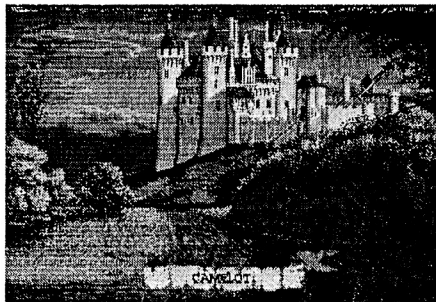
one of them could be yours! Simply read the review of the game in this issue, then answer these questions on the back of an envelope. Stick **MINDSCAPE COMPETITION, c/o PHIL CAMPBELL, PO BOX 23 MACLEAN NSW 2463** on the front, and YOUR name and address clearly on the back with your answers.

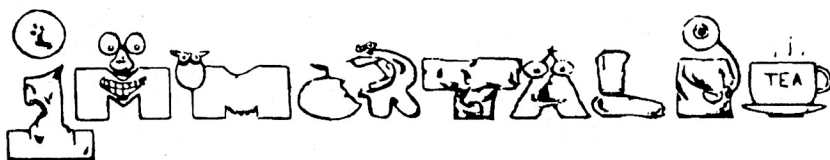
So what are the questions? Here they come...

- Which "Sir" do you become?
- What year is it in merrie Englande?
- Name two nasty knights.
- Name two other good knights.
- What show does the famous line "Goodnight John-boy" come from?

Don't mess around - get your entry in the mail as soon as you can!

This game is too good to miss.





I've only received a few old tips from one reader this month, so I'll begin with some of my own. They're cartridge only, but that can't be helped with the majority of games today.

If you've got tips (not pokes) on how to complete games, then send them to me and stop whinging about the cartridge pokes!

Creatures

This is the latest game from Thalamus, a company with a reputation for producing only quality games, and this is no exception. *Creatures* is one of the few recent releases to be as polished as a yuppie's BMW! It's damn good. As well as the poke, there is also a built in cheat for those of you with no cartridges. Simply (?) wait until the music dies out, now waggle the joystick in port one. The Fuzzies on the high score screen should be jumping up and down like they've got a bad case of Lemon Curry while you waggle. Keep waggling until the Fuzzies turn grey and then stop, plug the joystick into port two and play the game with infinite lives (admittedly, you may have to get a new hand...).

POKE 754, 173 : For whole legions of hung-over Clyde Radcliff's...

POKE 46888, 173 : To stop that precious time from tickin' away.

POKE 15594, 96 : So Clyde can kill earth-ridden slime, but they can't kill him!

Golden Axe

Probe are a programming team that churn out quality games on the C64 like there's no tomorrow (which may be right for the Oz industry), but *Golden Axe* is an exception. No two player mode, only one enemy attacking, no villagers running wildly across the screen, this game has so many faults in the conversion stakes that it's not worth listing 'em all... But if you wanna see Tyrus Flare's excellent maximum magical fx, then 'ave a squiz at these pokes!

POKE 13150, 173 : To get loadsa energy, just like eatin' ya weetbix!

POKE 65476, X: POKE 65477, X : Where X is the number of the magic that you want, but it can't go past your selected character's maximum.

POKE 3817, 173: POKE 3820, 173 : For infinite magical pots...

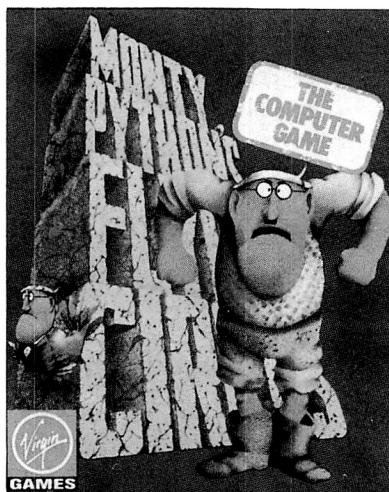
Midnight Resistance

VISUAL FX are to style and quality as Paul Keating was to stuffing up the economy. They are a pretty damn good programming team. Paul Keating was pretty damn good at stuffing up the economy. Nuff said...

POKE 10169, 173 : For unlimited resistance fighters.

First Strike

Here's a cheat for this lurvely *Afterburner* clone, just load the game, reset and type: POKE 38316, 173: SYS 2051 <RETURN> and infinite lives are yours...



Monty Python's Flying Circus

Spam, spam, spam, spam, spamitty-spam, luvrly SPAM... What? Oh right, the tips. Yes, well, if you wanna have infinite Gumbi's just type ANNE CHARLESTON on the high score screen and before you can comment about exploding TV penguins, you've got a luvrly can of ... erm ... unlimited Gumbi's

Usagi Yojimbo

I have no idea what this game is like, but if it's anything like the *Turtles* game, then it's a waste of time. So, if you wanna waste your time then POKE 20686, 15 for infinite money.

Jack the Nipper II

If my memory serves me right this was a pretty good arcade-adventure in it's time. But if it wasn't, blame it on my lobotomy!

POKE 51114, 173 : For infinite nip-pers...

Retrograde

That's how old these tips are folks, this game is the one that the guys at APEX did before *Creatures*! But it still deserves a bit of a poke...

POKE 50374, 173 : To give your spectruesque spaceman unlimited energy.

GRYZORURRRGGH!

This game is such crap that the AMSTRAD version was better!

POKE 29187, 189 : For infinite Gryzor's.

Delta

Hmmm, Stravros Fasoulas' second last game before he gave up programming and joined the army... One of the greatest shoot-em-ups of all time, even though a poke does help a bit...

POKE 2386, 0 : To stop your weapons from wearing out.

Parallax

Not one of Sensible Software's best games, yet not one of their worst (GALAXI-BIDS, yuk!). If you want infinite lives so you can figure out this really un-self explanatory game then go into your cartridge's poke mode and enter: POKE 5796, 96 For unlimited ships. Well, that's all from Jellyfish, and that's all from me...So, send anything at all to me (especially a can of SPAM for my collection) at this address:-

Slartibartfast,
4 O'Connor Dr., Bray Park, NSW 2484. □

Amiga HINTS & TIPS

Super Wonder Boy

Jason Stubbings (aged 9) of Carey Bay NSW, says if you get hit by the last monster on the first level about a centimetre away from the end castle, a heart will come out. Grab it! Thanks Jason. Tell your dad those rumours are true - I haven't finished the Mayhem level on *Lemmings*, so send in the codes. Mind you, some hints for the r-e-a-l-l-y tricky levels would help, too!

Shadow of the Beast II

David Rich of Caringbah, NSW is hooked on *Shadow of the Beast II*. He's sent the following handy tips:

1. After going west and rescuing the demon held captive, he'll recite a lengthy spiel about rescuing his "companion". The only valuable information I've been able to get from him is about the "traps". He'll then tell you which lever to press on the upstairs bridge which crosses the acid pool in the "Western Passage". This activates the elevator. Hit the wrong one and you're history!

2. Rescuing this demon "companion" is necessary to get the password for entrance to the "Eastern Passage" and the subsequent reward of the "parchment" (I think!). In the spirit of true sportsmanship, this password is variable, as is the lever in Hint no. 1. ie. the mongrels make sure that you can't bypass certain sequences in the game; but as in *SOFTB1*, you've got to play right through!

3. Go down the rope, head left, past the Giant Macemen to the "Karamoon Oasis". Get the jug upstairs and split.

4. Once the parchment is obtained, the next step is to head east, past the pygmies, kill the Monster Who Shoots Gobs Of Green Goo, and get his throwing axes. Then go back and stomp on the thin stretch of ground. This'll get you into the "Crystal Caverns".

5. Once inside the Caverns, the aim is to obtain the "ring". Waste the guards and use the throwing axes to kill the draw-bridge winder. First go up and hit both levers. Then go down and grab key no. 1 and get captured! Offer the jug in Hint no. 2 to the guard, get key no. 2 and grab the ring. You must rescue BOTH prisoners in order to escape through the Corridor of Spikes.

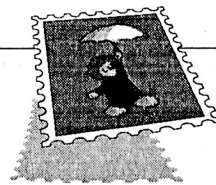
6. Head east, past the Serpent Sea Monster, the acid river and the bothersome bats. The Silvery Steel Swordsman can be vanquished by looking closely at the bridge.

7. The solution to Hint no. 7 will provide you access to the Whirlpool World. It's here that you'll obtain the Sea Horn. But be warned! The Giant Speaking Snail demands ALL your cash to get back!

8. Offer the Ring and the Parchment to the "Old Man". He'll then cast a "spell", and he's more helpful in providing information. □

Entertainment MAILBOX

PO Box 23 Maclean NSW 2463



Address your entertainment letters to Phil Campbell, PO BOX 23 Maclean NSW 2463, or fax them on 066 452060. Keep your comments or questions brief and to the point.

FRA - The Riddle Answered

Dear Phil, In the June Edition of *ACAR*, Andy Phang asks in his review of the game *Tower FRA* if any German readers can enlighten him as to the meaning of "FRA". I'm not German, but FRA is the IATA (International Air Transport Association) airport code for Frankfurt-Main. I hope this is of some help.

Kingsley Bugarin,
Guildford WA

Ed: Sorry, you're not German so we can't accept your answer. Seriously, though, Kingsley, thanks for taking the time to enlighten us. And just think ... you're one of the few people in the world to know something that Andy Phang didn't!

Back to the Future help wanted

Dear Phil, I have just purchased an Amiga 500 along with *Back to the Future*

2. Trouble is, I haven't been able to make it past the first level because of difficulties in trying to ride my hover board through Hill Valley. I've tried time after time, and I still can't make it. Would you please - I repeat, would you PLEASE - help me by telling me the cheat for the game, as I'm sure there would be one. I feel if I can't obtain these, then I would have wasted my money.

Andrew Webb
Toogoolawah, Qld

Ed: Well, Andrew, you'll be glad to know our readers have a great track record in answering pleas for help. And yours, I might add, is more heart-rending than most. Keep watching these pages!

More help please...

Dear Phil, Can anyone help me with the game *Spherical*? I'm currently stuck on Level 20, because I don't know how to kill the dragon. I have a C-64 computer, and although the C-64 content in *ACAR* is getting lower, I still enjoy reading the articles, tutorials and reviews on the Amiga. Keep up the good work.

Edmond Tatti
Tullamarine, Vic

Ed: Thanks for the comments on the mag, Edmond - we're trying to keep the C-64 fires burning, but the day has to come

when you take the leap to Amiga-land. And when you do, you'll be well prepared. In the mean time, let's hope some readers can help with your Spherical dilemma.

Flights of fancy for C-64

Dear Phil, Could you please advise me at to the best fighter pilot simulation game for the C-64. I've got the *F-15 Strike Eagle*, which is good, but what about *F-16 Combat Pilot*, *F-18 Hornet*, *Fighter Bomber*, and *Project Stealth Fighter*? Any help would be greatly appreciated.

Mark Bishop
Wagga Wagga, Vic

Ed: Our C-64 specialist Damian Caynes says *Fighter Bomber* has great presentation, but is a little slow. He recommends *Acro-Jet* from MicroProse. Contact Questor on 02 662 7944 for details of availability.

Pat on the back for clever contacts

Dear Phil, Just a quick letter to say thanks to all the "Clever Contacts" people in your mag. They've helped me complete two of my games - top class service! It's great to know there are people like them around who are willing to help fellow games-addicts.

I enjoy reading *ACAR* a lot. I recently converted from an English mag, which was filled with nothing but shoot 'em ups. *ACAR* is great, because not only does it have excellent reviews on a wide variety of games, but it's got *Adventurers Realm* and your excellent column. Keep up the good work!

Ben Toyne
Brisbane, QLD

Ed: Credit has to go to Mike Spiteri and the *Clever Contacts* team, as well as other readers who write in with help.

Long live The Giana Sisters

Dear Phil, I'm a new Amiga owner, and I enjoy reading your magazine very much. Could you help me out with cheating in *Giana Sisters*, please? What I need are unlimited lives ...

Simon Valentine
Bendigo, Vic

Ed: Stay tuned, Simon - and just to keep you going while you wait for someone to write in, try pressing A,R,M,I,N keys together to skip the level you're stuck in.

Competition confusion

Dear Phil, I've bought about 10 issues of *ACAR*, and I think they're great value for money. My only disappointment is that when you have the *Mindscape* competitions, I've only got a week to enter by the time your mag ends up in my newsagent!

Matthew Diggins
Port Pirie, SA

Ed: You're not the first to complain, Matthew, and we're doing our best. Problem is, we like to announce the winners two months after the competition, and to do that we've got to close entries by the end of the month. So remember, don't dilly-dally - get your entries in as quickly as you can. In the meantime, we'll do our best to stretch our deadlines.

Dealers panned and praised

Dear Phil, Thanks for your competitions and the variety in the mag. I'm writing to tell of my experiences with some of the companies that have ads in your mag. I've had a bad run trying to order 'Powercopy' from PCM Computers. After chasing wrong addresses and trying STD phone calls, I had no luck. In desperation I sent off to to PCM's P.O. Box - and after three weeks I finally got the goods! The pain is that you need two disk drives to use it. On the other hand, *Mindscape* have been fantastic - efficient, responsive, and polite to boot. All the best with a great magazine.

David Rossi
Ulverstone, Tas

Ed: Well David, the fact that you need two disk drives to use *Powercopy* is hardly surprising - why didn't you do your homework first? And whose fault is it if PCM weren't at the address you wanted them to be? Sending mail to a PO Box is hardly a "last resort" - I mean, businesses have PO Boxes for just that very reason, don't they? A three week turn-around on your order may be a little on the long side - maybe they were out of stock when you ordered?

CLASSIFIED ADVERT

Please place the following classified ad in the next issue

- ☐ FOR SALE
☐ WANTED TO BUY
☐ OTHER

RATES: \$8.00 for 15 words & 50c for each extra word. Find enclosed a CHEQUE or please debit my Bankcard:

Number: 5610

Expires:

Signature:

Fax: 02 398 5322

Phone: 02 398 5111

FOR SALE

17 BIT PD

Public Domain Software

\$3.00 a disk or

\$12 a disk pack (5 disks).

For our catalogue send a **stamped self-addressed** envelope to:

26 Owens St
Wangaratta VIC 3677

Original *Amiga Teenage Munant Ninja Turtles* to sell for \$30 or swap for other software.

Phone Peter on: 042 849 754

Amiga

SUPER FAT AGNUS CHIP

for 1 Meg of CHIP RAM

\$60

Phone: 02 398 5111

Ask for Andrew Dunstall



An Entertainment Revolution

Gail Wellington, Director of Special Projects, Commodore International, last month introduced Australia to a quiet revolution in home entertainment. The Darling Harbour launch of the clumsily named but neatly acronymed "Commodore Dynamic Total Vision" opened with a singer on a real live horse. Naturally, the horse did what horses do best in the middle of the red carpet. Then there were some speeches. And finally, a full scale demonstration of the much touted "CD for your TV." With 650 megabytes of storage linked to the Amiga sound and video chips, and access to full audio CD capabilities as well, the CD-TV is a mind stretching machine - especially if you want to play games.

Wellington demonstrated a number of upcoming titles, and all of them were impressive. In every case, the huge storage capacity of the CD unit was put to good use, sometimes for graphics, sometimes for sound, and sometimes for a huge database of information.

What, for example, do you get when you photograph Muirfield golf course every 30 metres or so and store the results on compact disk? You get *Jack Nicklaus Unlimited Golf*, the first golf simulation that approaches virtual reality. Produced by Accolade, the game features a beautifully animated golfer, great sound effects

and breathtaking real-life views. Scheduled for completion before Christmas, the game will retail for under \$100.

Xenon 2 - Megablast is already a well-known game. It's a vertically scrolling shoot-'em-up, full of high speed action for players with razor sharp reflexes. The original Amiga version was famous for its pulsating sound track. But wait 'til you play the enhanced CD-TV version. Now the synchronised audio track is lifted straight from compact disk, and the impact is dramatic. Hook it up to your home stereo and you will feel like you're at the movies.

One popular game that didn't quite survive the transition from board and dice to screen and disk was *Trivial Pursuit*. British software house Domark spent a fortune on obtaining conversion rights, then produced a computer game that was inferior to the original in almost

every respect. That, of course, was pre CD-TV. Add hundreds of high resolution digitised pictures, full stereo sound and computerised animation to the database of 2000 questions and *Trivial Pursuit* comes to life.

The animated quizmaster - a cartoonish owl - asks questions in a clipped British accent. "What percentage of chimpanzee genes are the same as a human being's?" As he speaks, the screen displays a colour picture of a cheeky chimp. Give the correct answer - 99% - and an orchestra bursts into life with a full scale fanfare, accompanied by the applause of a huge audience. Very rewarding.

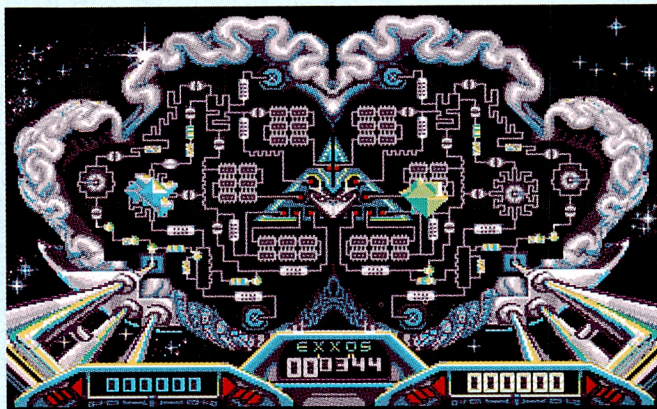
Without a doubt, though, the star of the show was *PlanetSide*, an amazing game from Psygnosis. It's still far from finished - in fact, it's not scheduled for release until Christmas 1992. But boy oh

boy it's hot. As the roar of jet engines pumps through the stereo speakers a steely-grey fighter swoops across the screen. A mountain landscape scrolls smoothly underneath - fractal graphics, regenerated from compressed data on the fly. The view changes. Now we're in the cockpit, and it's a life and death chase as we try to bring down a guided missile. Another scene change, just like at the movies, and now we're looking at the action from above. This stuff is real - and nobody can resist applauding as Gail Wellington brings the demonstration to a close.

These are games to look forward to - and they're just the beginning. The CD-TV is an entertainment platform with immense potential, and from this early taste of what's on offer it looks like the potential will be realised. Here at the ACAR entertainment section we'll be keeping you informed - watch out for our brand new CD-TV section starting next issue. □



Big Box



Blood and Tintin on the Moon. Now they're in the *Big Box*. But don't complain. They're still good games, and at the recommended retail price of \$79.95, you're paying less than eight bucks each.

Hostages is another game with a good pedigree. You're the leader of a crack anti-terrorist team assigned

Maybe Paul Keating has faded from view, but his recession is still larger than life. It is at my place, anyway. You're struggling to make the house payments. You can't afford petrol for the Jag. Your Bankcard bill is burgeoning. And you really, really NEED some new computer games to add a little joy to your otherwise drab existence.

But what can you do? New release games are a luxury. With prices near the thick end of the hundred dollar mark, a new game can make a big hole in the average weekly budget.

The answer, if you're patient, is to wait for your favourite game to be released in a compilation pack. Sure, the yuppies have played it already. But who cares? You're going to get a bargain.

The average compilation pack contains four games for about the price of a single new release. Not bad. But these days we're talking recession, and that means it's time for something more drastic. Something like the *Big Box*. The name fits. The box is twice the normal size. And inside it you'll find not four, but ten Amiga games.

The titles come from the back catalogue of quality French software house Infogrames, and granted, they're getting a bit long in the tooth. Amazing how time flies - back in 1987 I was impressed by pre-release demonstrations of *Captain*

the task of liberating a group of hostages in an embassy. With smooth, large scale animation and atmospheric gameplay, this is a game with real class.

Jumping Jackson is altogether different. This one is a puzzle style maze game with a healthy dash of rock-'n-roll. In a unique twist, *Jumping Jackson* makes you build your own sound track. The cutesy guy you guide around the screen picks up colour coded records - put a disk on the matching turntable, and the music begins. First the bass track. Then drums. Then guitar. And you've got your very own version of the Rolling Stones classic *Jumping Jack Flash*. Different indeed, and very good fun.

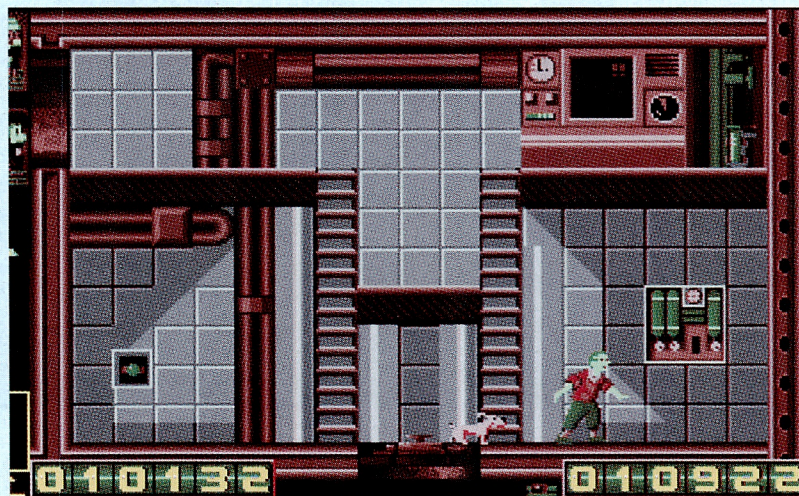
In a vaguely similar vein comes *Krypton Egg*, which is nothing more nor less than a very smooth version of *Breakout*. Remember the primordial video game where you had to bounce bricks out of a wall with a blip shaped ball? Same game, but now with much more finesse, and a host of added features like power-up bonuses and laser canons. It doesn't claim to be original - there are plenty of *Breakout* clones. But this one is as good as most.

Safari Guns promotes an interesting ethic. You're in the wilds of Africa, and you're carrying a camera and a gun. A parade of wild animals and khaki clad poachers passes across your screen at random - and guess which ones you have to shoot? Yep, this is another case of greenies gone crazy - shoot as many people as you like, just as long as you don't touch the animals. Still, it's a pretty entertaining game requiring fast reflexes on the change from camera to gun.

Teenage Queen didn't have much appeal. Playing strip poker with a computer is not my idea of fun. Trouble is, I always lose - not a good game for winter.

Bubble Plus, *Stir Crazy* and *Purple Saturn Day* are the remaining titles, and I haven't really checked them out. After all, playing your way through ten games takes time. That's why the *Big Box* is big value. Plenty of variety, good quality games and a reasonable price tag make it a compilation I would happily recommend. □

Distributed by:
Pactronics
02 748 4700
RRP \$79.95
C 64 \$49.95



ANDREW GORMLEY was feeling bored. But then he got hold of a life-changing game from Mindscape, and with all the zeal of a missionary, he's out to convert you. Will he succeed? Read on...

Turrican II: The Final Fight



About a year ago, Rainbow Arts produced what is arguably one of the best shoot 'em-ups of all time: *Turrican*. The combination of great graphics, fantastic gameplay and absolutely brilliant sound blew *Turrican* into the charts with after-burners ablaze. This excellent game gave Rainbow Arts a much needed boost. This time, however, they've gone one better and released the sequel - *Turrican II: The Final Fight*.

And they have indeed gone one better. All of the factors which gave *Turrican* its popularity have been included - and also enhanced - while the slight flaws have been ironed out. For example, the laser which simply turned without out any action from the little fighter in the original (shooting through your head was quite amusing!) has been changed so that he actually swings the gun around in a full circle. There are many other little details like that which make *Turrican II* a great game.

The detail in the graphics is incredible. The characters are superbly drawn with realistic movement. Not only that,

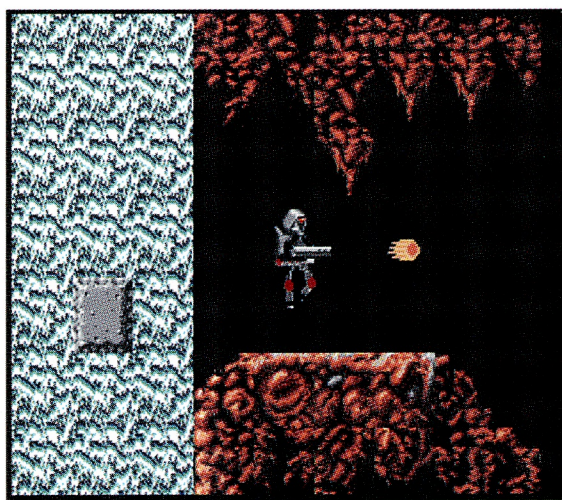
but the range of colour is startling if you study the background scenes closely. I reckon that there would be a spectrum of around 64 colours in just one of the waterfalls!

As in the first *Turrican*, the scrolling is excellent and doesn't hamper gameplay at all. It's very smooth and gives the game a good all-round feel.

I think that the music has fallen ever so slightly in its relation to the game. The soundtrack is good, but isn't the exciting and victorious megablast we had all enjoyed in the original. Full marks to the composers of the tune - but this time the music isn't quite appropriate for the fast-moving, quick-acting game which *Turrican II* is.

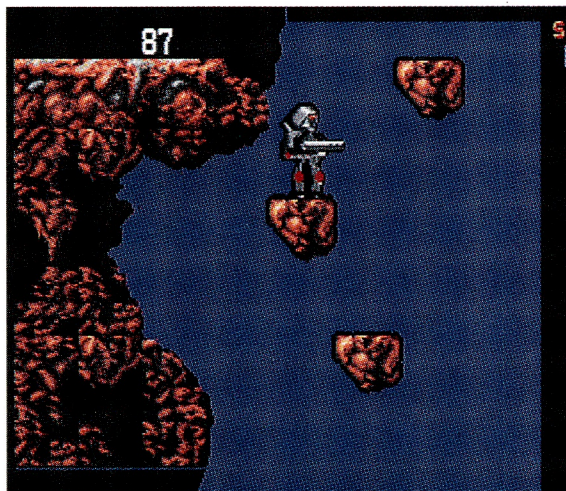
Finally, the complex gameplay is the factor which changes *Turrican II: The Final Fight* from a simple shoot 'em-up with good graphics and sound to an award-winning computer hit. Even in the first *Turrican* it was a little bit of the old 'go from left to right and shoot anything that moves'. The sequel has changed all of that. Well, maybe with the exception of shooting anything that moves!

For example, in one level, you are blocked from getting to the extreme right of the level by a furious wind which throws out all the little dead critters you blew apart - as well as a few live ones to keep you from getting complacent. The answer? Just jump down a waterfall to find yourself in an entire underground cave complex full of monsters - the nocturnal



variety this time! After destroying the cavern community you have a choice of a number of tunnels to the surface, but only one will get you right to the top. It's then that you have to fight the big end-of-level guardian. And what's he like? Again the magnificent gameplay. I'll give you just one comment: AC/DC should hire him as a professional dancer for Thunderstruck.

By now you should be able to realise why *Turrican II: The Final Fight* is such a superb game and why it is claiming rave reviews all around the globe. C64 users don't have any reason to complain either, as Rainbow Arts have released the Commodore version as well - and from what I've heard it's as near Amiga quality as that computer will go. □



Distributed by:
Mindscape
02 899 2277
RRP Amiga \$69.95
C 64 cassette \$39.95
C 64 disk \$49.95

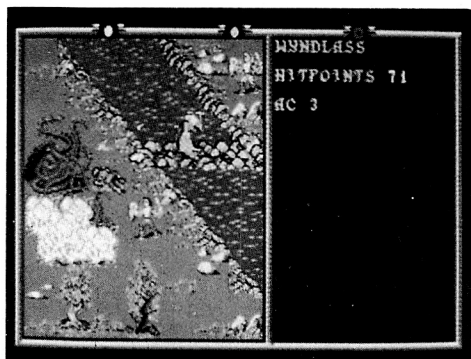
ROSS CAYNES doesn't know whether he's coming or going. And he doesn't know whether he likes this game or not. I think he does. But read on, and decide for yourself...

After three years of belting out Advanced Dungeons and Dragons computer role-playing games, you would think SSI would be innovative and try something completely different, wouldn't you? Of course you would (I know I did). But if you've been

Death Knights Of Krynn



waiting with baited breath for something new, original, perhaps unique, now is the time to expel that breath of hope and inhale a deep lungful of the truth. *Death Knights Of Krynn* is the usual AD&D stuff we've come to expect from SSI. So if you absolutely detest SSI's AD&D conversions, avert thine eyes now!! If, however, you can't get enough of the damned repetitive things, like myself, read on...



You may notice I called D.K.O.K. (oo-er) a 'computer role-playing game'. Perhaps this is a bit strong when you come to think of it. You see, enjoyable though the game is, it is little more than a first-person perspective hack-n-slash-walk through a maze-pick up the magic items and then finish the game type of thing. What I mean is, there isn't really much role-playing in the game. There are some yes or no questions and quite a few mazy bits, but no pure role-playing. It might have been best if SSI had called it a 'Computer Combat Game' because roughly threequarters of your time is spent doing just that.

This minor gripe (I know it doesn't look minor) is one of the things that should be pointed out - it just isn't the game for hardcore role-players. There are a number of other gripes as well, unfortunately. For example, chintzy sound.

It would also seem that they've had the same problem with the non-combat graphics as they're almost the same as, in fact they may be a bit worse, than, those on *Pools of Radiance*! Except for the map, of course, which has fewer distinguishing features than a rotten lemon. Quite a few times I found myself trying to walk into a rock, thinking it was a town, only to bump into a mountain half an hour later to discover it's really a city in fancy dress!

But enough of my whinging, eh? The way I go on it seems like the game is about as much fun as Saddam Hussein in bed. There are in fact several good points to the game.

The combat graphics and sound, for example, are very nice. Oh my wordy yes, very nice indeed, though nothing new (not that I'm complaining, mind you). The range of levels is much greater, rising even unto the lofty pinnacles of 18th level, something not often accomplished in actual AD&D! The spell levels are also greatly increased, allowing mastery of up to 8th level Wizard, 7th level Priest and 2nd level Druid, quite an impressive range of spells, to say the least.



There are new character classes (including my favourite, the Paladin) allowing even the most picky of players to create an adventuring party to their liking. And to combat these new classes what do we expect but new monsters, and there really are quite a lot of them too.

If you like combat orientated adventures, if you just like AD&D, *Drag-onlance* or are simply new to the scene, try this game out by all means. I did, and I love it! □

Ratings:

Role Playing:	30%
Documentation:	80%
Graphics:	60%
Sound:	75%
Gameplay:	85%
Overall:	88%

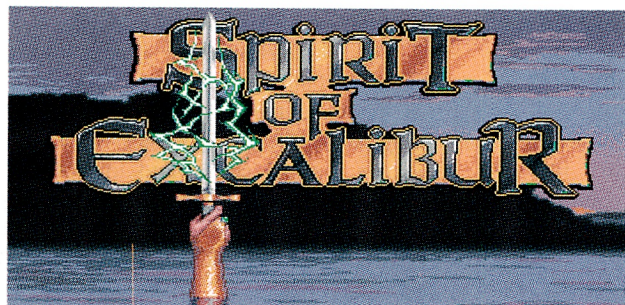
Distributed by:
Electronic Arts

075 963 488

RRP C64 \$49.95

Soon to be released for Amiga

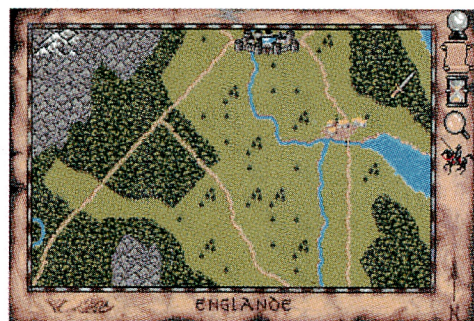
Get ready for some medieval antics as *Phil Campbell* sets out on the quest to become King of Merrie Englande...



Being born with a silver spoon in your mouth isn't as good as it sounds. For one thing, it can be very painful for your mum. And for another, it can get you into all sorts of nasty situations.

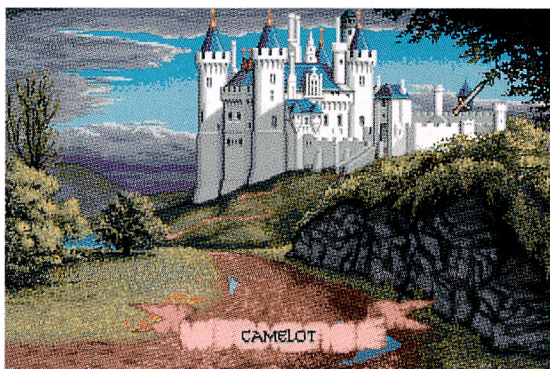
Put yourself in Sir Constantine's boots for a moment. He's a typical medieval "born-to-rule" type of guy, upper crust, educated at all the right schools. And life's not easy at all - especially since the death of King Arthur. Some people want Constantine to take over. And others want him dead.

That's the 'meat in the sandwich' situation you'll find yourself chewing over in *Spirit of Excalibur*, a chivalrous medieval tale set in the Merrie Englande of 539 AD. The first challenge is to guide Constantine safely to the throne. Then you will preside over the Knights of the Round Table in an effort to bring stability to your fragmented nation, while fighting off the evil advances of Melehen and Morgolon. When you sort that lot out, there's more. Like a giant warrior at the walls of Camelot. Or the Enchanted Knights of the Forest Sauvage. And in the final episode, Morgan Le Fay's Revenge.



Spirit of Excalibur is a beautifully crafted game. Even the instruction manual is a work of art - the text reflects thorough historical research, and the delicately tinted woodcuts add an authentic touch of atmosphere.

The quality is just as apparent on the screen. The game is controlled from a scrolling map display, with a *HyperCard* style system giving access to close-up pictures of each village and castle. With a colour palette picking up the lush



greens of the English countryside and a style reflecting the influence of medieval tapestry, the graphics are dazzling.

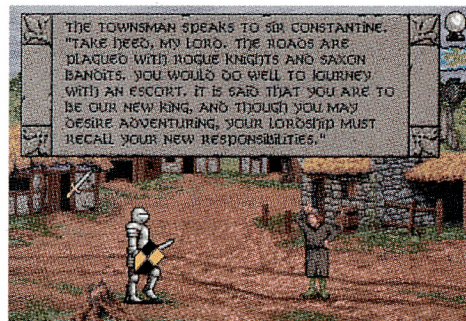
Spirit of Excalibur breaks traditional boundaries. It's a blend of fantasy role playing, adventure and combat simulation, with an optional dose of action in the fight sequences. Early in the game, for example, I encounter a monk. "Ah, Lord Constantine," he exclaims, "You have come just in time. The evil Knight Lupinus has challenged Sir Villars to single combat. But Sir Villars himself is recovering from wounds he received in Wales. Will you stand as champion in his place?"

Always eager to impress, I accept the challenge. In a traditional Role Playing game, the outcome of the battle will depend on the accumulated skill-points of your character rather than your speed with the joystick. You can certainly play it that way if you

prefer, but if you're itching for action you can take over, controlling every thrust and parry for yourself. This time I simply choose to watch, as Constantine makes easy work of his enemy. In moments Lupinus lies dead on the cobblestones, and the grateful Sir Villars falls to his knees. "My Lord Constantine," he says, "You are a worthy successor to King Arthur. I swear my eternal fealty to you and the realm." A good start in my quest to become King.

Soon I have added Sir Gahalan-tine to my list of allies. Then there's a tactful donation to the influential Abbot of Salisbury and some clever political manoeuvring, and by the time I arrive at Camelot I'm welcomed with open arms. "Long live the King!" But that's just the beginning - and after a quick meeting of my cabinet around the famous table, we're off on our very first quest. Now role playing fans will really be in their element, with characters to select, equip and galvanise into a first-rate team.

To my mind, the best thing about *Spirit of Excalibur* is that it's simple to play. Sure, it's beautifully presented. And sure, there's depth - plenty of it, with hundreds of computer generated characters and cities scattered around the 16 screen scrolling map. But in this case, style, depth and simple fun are superbly blended into a thoroughly engrossing game. □



Distributed by:
Mindscape
02 899 2277
RRP Amiga \$69.95

Ratings:
Graphics: 86%
Sound: 79%
Gameplay: 83%
Overall: 84%

Hill St. Blues



It's Roll Call - 7:03am. Sergeant Esterhaus is at the podium, and he's waiting to give out the assignments for the day. No, this isn't the TV version of *Hill Street Blues* we're talking about here - it's the Pactivision version for the Amiga.

At first I must confess I was a little disappointed. I'm not sure what I was anticipating, but when I booted-up the game it was something completely unexpected. This isn't the fast-action, shoot-'em-up I thought it might be. This game involves thought and planning. Mind you, after a few attempts, I was hooked! Your job is to keep the crime rate under control in the Hill Street precinct. At your disposal are nine officers (Coffee, Hill, Renko, etc. - all the regulars). You can dispatch them as you wish to fight crimes as they're reported to you over the radio. It takes some time to get the hang of this. When you're sending out nine officers it becomes a little difficult to remember where they are or who they're looking for. (I'd suggest you have a pen and paper handy to make notes.)

At any point in the game you can go to Captain Furillo's office. From here you deploy your officers, inspect the crimes available for investigation, check on the morale of the officers and see if you're managing to keep the crime rate under control. This, really, is the engine

room of the game.

The screen displays an aerial view of part of the precinct. As you select an officer you'll view the part of the precinct where he's investigating his crime. As soon as you spot the suspect, arrest him and take him back to the station.

When you do make an arrest you'll need to make good notes about the suspect and the crime. Why? Because you'll have to go to court and identify the suspect as well as give details about the arrest (by the way, Joyce Davenport is there to represent the crook in court). You'll have to identify the alleged criminal in a line up - if you can't he'll go free.

The sound in the game is limited to a bit of city noise - cars and horns, and the siren of your patrol car. Not too exciting

- but noise isn't the point of the game. The game looks good. The graphics are sharp and the whole thing flows well. From your aerial view there are cars moving around, pedestrians, garbage in the street - it all looks very realistic.

Hill Street Blues is a great game of skill and planning. I liked the game a lot - it gave me the chance to fight crime along with my TV heroes. If you're looking for fast action and lots of violence then forget about the Hill. But if you're looking for a game to test your skills of organisation and strategy, then this is the one! □

Luke Tattersall

Ratings:

Graphics	82%
Sound	58%
Playability	76%
Addictiveness	73%
Overall	78%

Distributed by:

Pactivision
02 748 7400
RRP Amiga \$59.95

Esterhaus. I will process all the criminals that you arrest and bring back to the station



MICHAEL SPITERI'S

Adventurer's Realm

If you are stuck in any adventure game, or if you need a push in the right direction, send your problem to: **Adventurers Realm, 12 Bridle Place, Pakenham, Vic 3810.**

If I can help, I'll send you the answer to your problem. If I cannot help, your problem will appear among these pages and eventually someone will write in with assistance. Hint sheets for the following adventure games are available free of any charge:

Zak McKracken, Maniac Mansion, Indy, Zork I, Zork II, Zork III, Bards Tale I, Bards Tale II, Bards Tale III, Guild of Thieves, Jinxter, Pawn, Fish, Uninvited, Deja Vu, Hampstead, Hitchhikers Guide, Faery Tale, Borrowed Time, NeverEndingStory, Dracula Pt2, Hobbit, Adventureland, Pirate Adventure.

Choose up to four, enclose a stamped addressed envelope, and send your request to: **Free Hint Sheets, 12 Bridle Place, Pakenham, Vic 3810**

The Realm also caters for those who love role-playing-games (such as *Pool of Radiance, Azure Bonds*, etc). If you are stuck in a role-playing game, write to Kamikaze Andy - alias Andy Phang:

Realm's RPG Dungeon P.O.Box 315, Maddington, WA 6109.

Andy does not have hint sheets, and like me, will not reply to any letters that do not have a stamped addressed envelope enclosed.

If you have a modem, you might like to log on to **Island BBS** - Realm's official bulletin board. You can leave your queries on the Realm's BBS mailbox, and even chat with other adventurers, or download hints and tips. **Island BBS** also offer many other interesting things for you to explore, and membership is a few dollars if you decide to join. It is available 24 hours a day - ring (03) 742 3993.

Finally, *The Official Adventurers Realm Hint Book* is out now at a newsagent near you. It costs \$9.00 for specialised hints covering over forty adventure games. Can't find a copy? Ring (02) 398 5111 and ask for Darrien. □

About the Realm

Adventure games - they have been around in some form or another for years, and for over three decades thousands of adventure games have been played on all sorts of computers.

Just when you thought the era of the adventure game had come to an end, when the likes of perplexing parsers, compelling stories, and brainteasing problems seemed to be a thing of past, and the days of solving Infocom classics are all but gone; just when you had begun to accept that role-playing games are the closest you would ever get to reliving that old adventure game magic, an exciting stream of new adventure games have rolled out - begging to be solved.

Next month, *Adventurer's Realm* will be celebrating five years of bringing together and helping adventurers from all over Australia. The fact that an article can run for five years covering just one facet of computer games is enough of an indication that adventure games are here to stay!

New exciting releases from ex-Infocom author Steve Meretzky, *Magnetic Scrolls*, and *Sierra* are leading what appears to be a strong return to the excitement, addictiveness and fun that made adventure games so popular in the first place.

Next month, the Realm will be looking back at the progression of adventure games through history, and what we can expect in the future. There will be a huge selection of hints and tips, and even a few goodies for you to win. So if you're an adventure fan, don't miss next month's bumper Realm section! □

Realm's Chit Chat

Clever contact Scott Logan is thinking of starting a small adventure club for Commodore 64 adventurers. Send a stamped addressed envelope to Scott (address is in clever contacts section) for more info.

Kylie Daley wrote in asking for a list of adventure games the Realm stocks. Eh, I'm afraid the Realm doesn't stock adventure games. We do stock hint sheets, however!! Kylie would also like some help in *Pool of Radiance*.

Mark Bishop of Wagga Wagga writes.... "I was recently given a disk with the game *Sorcerer* on it. Unfortunately, I was not given the instructions on how to play the game. As it looks like an interesting game, I was wondering if you could help me in obtaining a copy of the instructions." MS: Out of the question! Don't you know its illegal to pirate programs? Does anyone have an original copy of *Sorcerer* they could sell Mark?

Clever Contacts

A couple more clever contacts who are willing to volunteer their time and effort to help troubled adventurers. Firstly, a big thank you to all our clever contacts, and secondly, always enclose a stamped addressed envelope when writing to a clever contact.

Scott Logan, 9 Colington Street, Mansfield, Brisbane, QLD 4122 can offer help in.... *Pool of Radiance, Zak McKracken, Temple Curse, Last Planet, Island of Spies, Adventureland, Curse of Azure Bonds, and Corruption.*

Allan Mills, 36 Pickworth Street, Holt, ACT 2615 can offer help in: *Maniac Mansion, Ultima 1,2, Neuromancer, Space Quest 1,3,4, Leather Goddesses, Larry 3, Pool of Radiance, Curse of Azure Bonds, and starters in Kings Quest IV.* □

The Dungeon by Kamikaze Andy

Congratulations must go out to Accolade, who did a fantastic job converting its hit text-graphics adventure *Search for the King* to the Amiga. With 32-colour graphics and superb music, *Search for the King* is definitely one of the best adventures of the year. Amiga owners who buy the game also get a bonus hintbook thrown in, which will come in handy as you attempt some of the weirder puzzles.

By the way, Accolade will release *Altered Destiny* (again, it's a magnificent Amiga conversion of an IBM-PC adventure) next month, and hopefully *Conspiracy: The Deadlock Files* (which will feature digitized photographs as graphics,

will require 1 megabyte of memory and a hard disk is recommended.

SSI has just brought out its long awaited Amiga conversion of *Secret of the Silver Blades* (the third in its *Forgotten Realms* AD&D series), which should please many RPG fans. However, there isn't much of a difference graphics or soundwise, and the gameplay is pretty much the same as previous efforts (effectively, lots of combat!). The fourth installment of the series is already planned for release in early January, and is tentatively titled *Pools of Darkness*.

The sequel to Buck Rogers has been put back to next year as well, and there

and will also be released for CDTV) by the end of the year. There will be a sequel to *Search for the King*, and it will feature a mouse "point and click" interface instead of the type-in parser used in the first game. Look for the sequel early next year. All games

bird's-eye view that was used in the previous six games. In fact, *Ultima VII* will closely resemble *Wing Commander* in interface, being a first person perspective game!! How die-hard *Ultima* fans will take to such news will depend on how Origin implements the new system. Sources in the company claim that using such a method makes the game easier to play, and more realistic. Hmm. We'll have to wait and see (and when I mean wait, I mean wait! *Ultima VII* is scheduled for Amiga conversion sometime late next year!).

Speaking of all things Origin, designer Chris Roberts has started work on *Road Commander* (tentative title), which will use an interface similar to his ground breaking *Wing Commander*, but set on solid ground. Details of the game is still sketchy, but the *Dungeon* will bring you updates as they appear. Mindscape UK has done a pretty good job converting *Wing Commander* for Amiga, using 32 colours and ray-traced graphics. Expect it out sometime in October.

Finally, many of you are probably wondering whatever happened to *Land of Legends*, a much touted RPG that was supposed to be out in 1989, but has yet to be seen? Well, publishers MicroIllusions seem to have gone out of business, and with it goes *Land of Legends*. Hopefully some other company will pick up the title, which had colourful graphics and lots of potential.

The sequel to MicroIllusion's most famous title, *Faery Tale Adventure*, is definitely coming out on Amiga format later this year, but this time it's distributed by New World Computing. Along with *Faery Tale II*, New World will be coming out with *Might and Magic III: Isles of Terra* for Amiga sometime in December. It features some of the greatest graphics ever seen on 16-bit machines, and also utilises a fair amount of digitized speech! Unfortunately, New World has confirmed that since the game is so large, a hard disk is absolutely essential to play the game.

Planet's Edge is another RPG coming up from New World, but it has a science fiction scenario and features overhead *Ultima VI* style graphics, rather than the usual *Might and Magic* 3D view. Expect it in January! □



Eye of the Beholder

has been confirmation that a sequel to the hugely popular *Eye of the Beholder* will eventuate sometime next year on Amiga. By the way, *Eye of the Beholder* is one of the *Dungeon*'s favourite games this year, and SSI has certainly done a great job in the Amiga version.

In what is probably one of the greatest shocks of the year, Origin has disclosed that *Ultima VII* will completely abandon the

Problems, Problems & more Problems or the Troubled Adventurers Dept.

Alas, here are some problems that need solutions quickly. If you can help out, please write it soon!!

Chris Stratton from Victoria is stuck on *Star Command*, in the mission where the Princess' ship was attacked and she escaped near a black hole. How does Chris find her?

(Chris would also like some help with the swamp in *Legend of the Sword*!)

George Glover of Queanbeyan in NSW would like any help for two games- *Astrobus Affair* and *Runaway*.

The Loser from Bondi Beach, NSW, desperately needs some help in *Buck Rogers*. He is up to the part of the game that involves the smashed spaceship (Level 2). He's not really sure what to do!

Vicky Cooke from Salisbury Nth in SA is stuck in *Island of Spies*. She is on the mining ground, has moved the rock and truck to reveal a tunnel leading south, but she cannot seem to go south. Help needed soon, please!

Battletech has claimed yet another victim, this time in the form of **Brian Jewitt** of Ashgrove in Queensland. Brian is stuck in the map room and is unable to gain access to the room off it. He requires the password, and hopes to find the white code in there to send off the message to K. (?). Only a *Battletech* expert can help Brian.

Darren Healy of South Windsor writes to me with a *Lemmings* problem! (Arrgh! I had a feeling a few of these would creep through!) He is stuck on Tricky Level 26 (BKONMNFKIFQ). If anyone can help Darren, please send it to Phil Campbell's section! Darren is also stuck in *Shadowgate*. Any hits will help him out.

Finally, **Christine Hill** of Florey, ACT is stuck in the *Jetsons*. She can get George Jetson to the planet of Robotopia, but she does not know what to do next! Any takers?

Help, Help & more Help or the Smart Adventurers Dept.

If you were stuck a few months back, then there is a good chance the answer to your problem is here - below!!!

Many thanks to those who kindly sent in their hints.

Game: Kings Quest 4

For: Stuart George (June issue)

From: Dale Priem, Oyster Bay, NSW.

Help: Firstly, when you are on the pier you must jump off and swim west for three screens, avoiding the sharks. You will come to an island, and if you search all the beaches you will find a peacock feather. Secondly, the caves behind the waterfall have a number of screens. You must save the game before you go into

each screen, and if the troll is there you must restore the last game (sometimes he is not there).

Finally, you cannot get into the giant's house until you have brought the unicorn to the evil witch. After that, the door will be unlocked.

Game: The Jetsons

For: Matt and Luke Walsh (June issue)

From: Christine Hill, Florey, ACT.

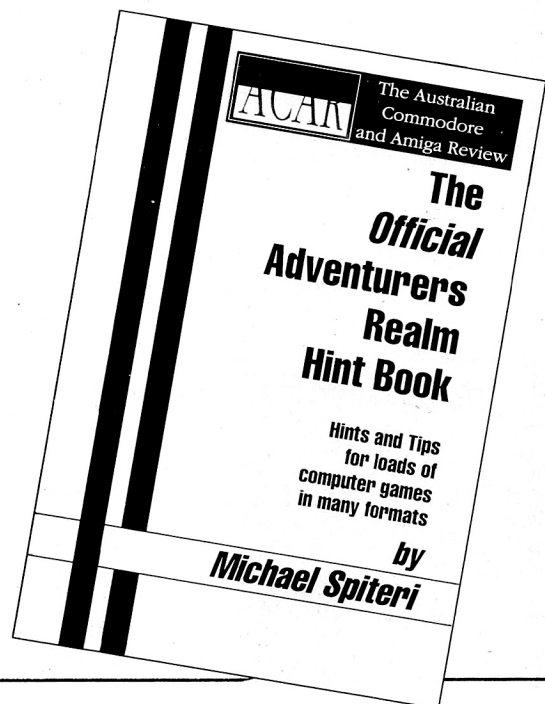
Help: Go into Judy's room, and move her computerised dancing shoes. The car keys are under them. From the living room, shut down to the garage. Use the keys to unlock the car and open the canopy. Entering the car will automatically take you out of the house, but you can always return. Don't forget to go into the living room and get the briefcase (in the lower right-hand corner of the screen). I also get the bowls and magazine on the coffee table, but I haven't found a use for them yet! There is a credit card in the drawer of the night-table (in the main bedroom), which is quite handy at the shopping mall. □

Stuck in an adventure game? Need help? - get your copy of the Official Adventurer's Realm Hint Book now!

Hints and tips on more than 40 games, compiled by Michael Spiteri, whose "Adventurers Realm" appears every month in this magazine.

**Only \$9.00
from
newsagents**

Or send cheque or Bankcard number to
Commodore and
Amiga Review
21 Darley Rd,
Randwick, 2031
(02) 398 5111



VECTOR CHAMPIONSHIP RUN

If you're a Formula One freak like me, then you're the type of person who sits around till 1.00 am to see the races live. In the end, though, we car racing freaks always end up hanging out for a slice of the action - there'd be nothing like doing a bit of racing yourself, would there? Well, now it's almost possible - thanks to *Vector Championship Run* by Zeppelin Games.

Ratings:

Graphics: 87%

Sound: 80%

Gameplay: 90% - mouse
40% with joystick

Overall: 89%

A snappy soundtrack introduces you to the selection screen. There's a choice of six Formula One circuits (including Monaco and Silverstone), and you can also opt for controlling your car via the joystick or the mouse. It turns out that using the mouse is the smoother way to

control your temperamental and jerky Formula One car - so if you want to avoid frustration, ditch the joystick for this one.

The 3-D graphics are great! From the cockpit of your car it's quite easy to get the sense of sweeping into the bends. But hit the railing or another car and you'll know all about it - the crunches help you enter into the Formula One world of buckling panels and dented egos. I managed to actually overtake a few competitors, but in the end the gameplay still had heaps of challenge left in it. Yep, this one's worth your while. (MF)

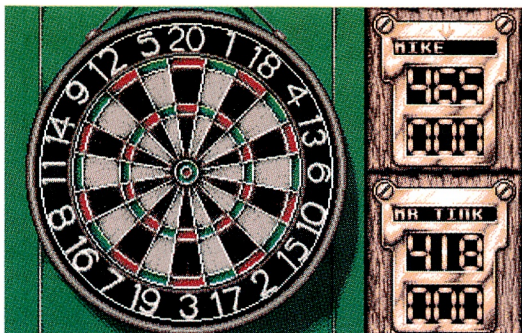


Distributed by: **Pactronics** 02 748 4700
RRP Amiga \$49.95

Hey - pssst! Are you into the pub scene? You know, the smokey social dens of the average working man - the place where you watch the greyhound races on the Skychannel and knock back a few beers with the boys. Where the jokes get a bit on the bawdy side, and everybody gets into a good game of darts.

Especially the darts! There's no substitute for hearing the satisfying clunk of a well-aimed dart hit the board. *Jockey Wilson's Darts* is what you'll be using on your Amiga. The package features three separate dart games - Tournament Play, Two Player Head-to-Head, and the 'Round the Clock' game.

The graphics in this package are really quite good. You're confronted with a normal matchplay dartboard, with your dart floating around in the foreground.



When you want to throw the dart, hit 'fire',

and you'll see your dart

lob towards the board. Clunk! There's a score-board on the screen

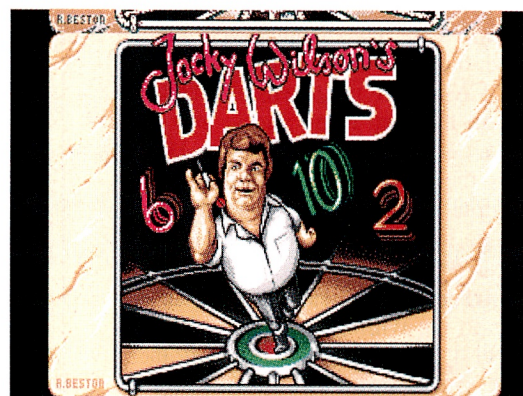
which keeps track of your progress. Sound effects are nice, with a

digitised referee calling the shots.

Other than that there's not too much else to it. After all, darts are darts. The good thing is that you don't end up with holes in the wall when you miss the board. And at the budget price of \$19.95, it's worth snapping up. (MF)

Distributed by: **Pactronics** 02 748 4700 RRP Amiga \$19.95

Ratings: Graphics: 75% Sound: 70% Gameplay: 75 %
Overall: 75%



Super Off Road sets you in the drivers seat of a mean lookin' 4X4 - you're at the starting line, head to head with three other drivers. They can be human like yourself, or computer controlled. If you want to play with your mates, one will use a joystick in port 0, the other will use the keys, and you will use the joystick in port 1. Fair enough, unless you're the sucker stuck with the keyboard!

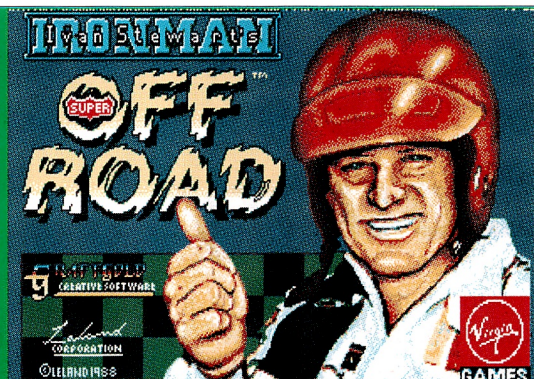
The green light flashes, and the race is on. Point your truck where you want it to go and push forward on the joystick and you'll start thrashing round the track - it's a fair dinkum sand-pit affair, a dirt track with humps, bumps and water traps everywhere. High fences around the track keep you more or less on course, but in the early stages it's easy to find yourself going backwards in the bun-rush.

There are bonus nitro tanks to intercept, as well as cash prizes - they'll appear at random on the track, ready to be picked up by the first car on the scene. Bonus cash can be used at the end of the race to upgrade your car, with a bigger engine, better tyres and more nitro for turbo boosting your performance.

Graphics in *Super Off Road* are beautiful - the tracks are highly detailed in 3-D perspective view. The four brightly coloured cars are nicely done too.

The action is fast and smooth, though joystick control takes a bit of getting used to. This is one of those "push forward for straight ahead" systems, with left and right pushes to turn your on screen vehicle left or right around the track.

Fans of *Super Cars* and other "view from the top" style car race games are in for a real treat with *Super Off Road* - it's much better than its predecessors in almost every respect.



Ratings:

Graphics: 86%

Sound: 75%

Gameplay: 82%

Overall: 85%

Distributed by:

Mindscape

02 899 2277

RRP Amiga \$49.95

C 64 disk \$39.95

C64 cass \$29.95



NINJA RABBIT

It's hard to know how seriously you're meant to take a game with a name like *Ninja Rabbit*. And when the star of the show has fur, buck teeth and a pair of lanky ears, it's even harder.

Seriously though, doc, for a budget title *Ninja Rabbit* ain't bad at all. There's plenty of beat-em-up action against a number of classy looking backgrounds. Various Stoats, Newts and Weasels line up for a punishing round with the Rabbit - then it's down the burrow for some underground action. Down here there are falling rocks to contend with, flurries of furry fiends, and later, golf balls to dodge as you wander across the local driving range.

The game's Ninja moves are fast and smooth, with good response to the joystick. Jump kicks make a satisfyingly rabbity "boing" - but other than that, the action really means business.

Graphics are lovely - the English countryside in the background is a real treat. The main characters are large and well defined, looking remarkably realistic for such an unrealistic game. Sound effects are effective, with all the mandatory grunts, groans and slaps. Worth a look. □



Ratings:

Graphics: 79%

Sound: 74%

Gameplay: 74%

Overall: 78%

Distributed by:

Pactronics

02 748 4700

RRP Amiga \$19.95

King's Bounty

I think the name says it all. You are a bounty hunter for a bloke known as King Maximus. Now this king was a bit careless and left his Sceptre of Order lying around. Areth Dragonbreath's henchmen stormed the castle and stole the sceptre and plan on using it for their own evil ways. This is where you come in. You have to find the sceptre on one of four islands. You have to find villains in castles and beat them, then garrison their castle and use it for your own use. Each villain you defeat has a piece of a map. The more villains you capture the easier it gets.

King's Bounty is an adventure game, strategy and action game all in one package. The graphics are in the format of the *Ultima* series and the music/fx are also good. To start the game you have

to pick a class of player. There are four to pick from. There is a paladin, a knight, a barbarian and a sorceress. Each of them have qualities that excel others but they all have their downfalls. Then you get to pick how long you need to find the sceptre. The maximum is 900 days and the least is 150. Then it is off to the game.

You start on the island Continentia and have to find seven villains and a map to go to the next island. There are castles, towns, roaming beasts that want a fight, dwellings where you can recruit soldiers for your army, and treasure chests with lots of goodies inside.

I am a person hard to please and I don't really like adventure games but this one is the best I have played and it is recommended to all adventurers - it's also very addictive. (JG) ☐

Ratings:

Graphics: 80%

Sound: 70%

Gameplay: 84%

Overall: 84%

HARPOON BATTLESET II

North Atlantic Convoys

Ratings:

Graphics & Sound: NA

Gameplay: 85%

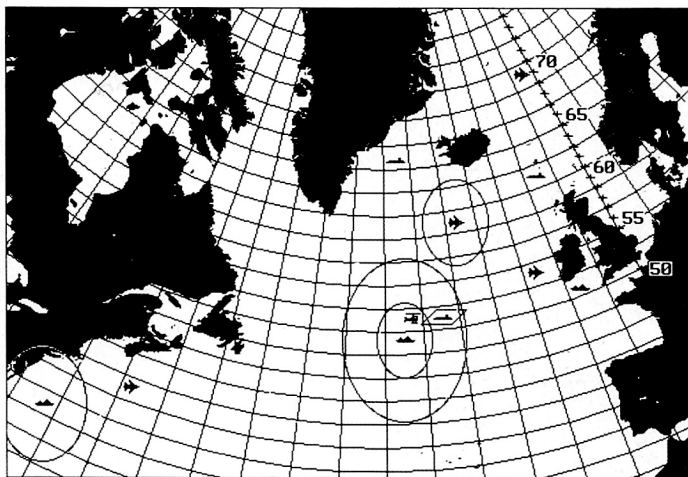
The first in a series of extra scenario disks for *Harpoon*, *Battleset II* again pits the Soviets and NATO in a conflict over European territory. Set in the 1990s, Europe is under the threat of a massive Soviet invasion after the demise of Perestroika and Glasnost. Russian Hardliners have taken over the Kremlin, and their first act of government is to attack and subdue NATO forces in the continent before reinforcements can arrive from the United States (a scenario many strategists consider a real possibility, especially if Gorbachev fails in his push for reforms).

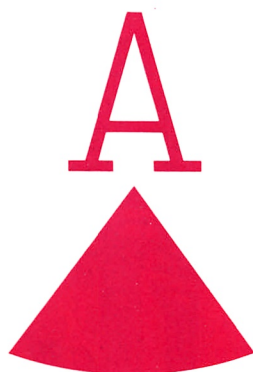
In the tradition of *Harpoon*, you won't be controlling the land forces of either side, rather you will take charge of the naval activities on the Atlantic after war has broken out. If you're the Soviet Commander, it is up to you to deter, damage, delay, and destroy the supply vessels that make their way across the ocean. Play the part of the NATO commander, and your task will be to safely guide such vessels into friendly European harbours, and hopefully turn the tide against the Red Machine.

This and other *Battlesets* require the original *Harpoon* to run, and will also contain some details on new types of naval and air units. Like *Harpoon*, the *Battleset* series of disks is one of a growing number of products that will support any Amiga hard drive (vital in a game of this nature). (AP) ☐

Distributed by: **Electronic Arts** (075) 991 388

Requires **Harpoon**. RRP Amiga \$45.95





PROFESSIONAL EDITION

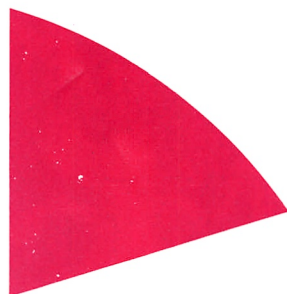
Expanded Dictionary, Thesaurus with Definitions

and Hyphenation, 1 MEG Required

Faster Screen Display, Unlimited Graphics Per Document

Version 2.0

WORD PROCESSING ACE



excellence! the fastest word processor for your Amiga
is the ace-in-a-hole for your writing needs.

And we've stacked the deck in your favor with 250 available
fonts per document; a Spell-As-You-Type 140,000 + word Dictionary
(with legal, medical, technical, scientific, and geographical supplements);
Grammatical/Style checker; 1.4 million Thesaurus with definitions;
Index and Table of Contents Generator; Headers, Footers and Footnotes.

You'll deal in PostScript output; True WYSIWYG; automatic Hyphenation;
Math; resizable Color Graphics; flexible Mail Merge; Columns and
easy-to-use Macro-Language making complex actions a snap.

With excellence! word processing is all aces.

Committed to excellence since 1978



Distributed and Supported in Australia
by

COMPUTERMATE
products (australia) pty. ltd.

P.O. Box C64, Mt. Kuring-Gai, N.S.W. 2080.
Ph: (02) 457 8388 Fax: (02) 457 8739.



Spirit OF EXCALIBUR



Proudly distributed by
Mindscape International
5-6 Gladstone Rd
Castle Hill NSW 2154
Phone: (02) 899 2277
Fax: (02) 899 2348

Available in AMIGA format
Soon to be released for
PC COMPATIBLES and ATARI ST

